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NOVEMBER 12, 1949


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# RAILWAY AGE

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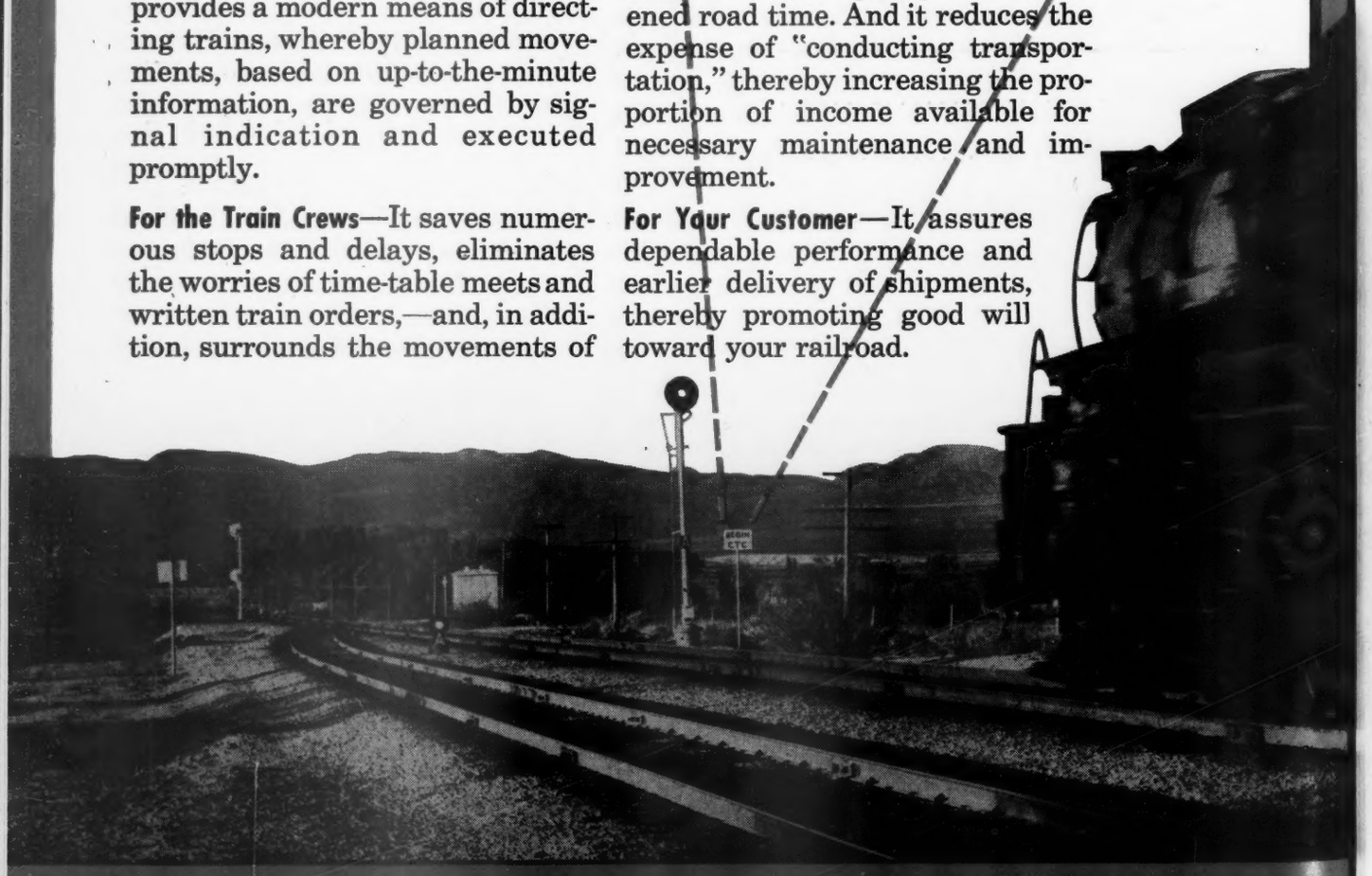

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# WEEK AT A GLANCE

**COMING ATTRACTION:** Next week, *Railway Age's* 1949 Passenger Progress Issue.

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**CLYDE M. REED:** The accidental death, on November 8, of Kansas Senator Clyde M. Reed has deprived Congress and the country, at a time when his particular knowledge and abilities are desperately needed, of the services of the man who was perhaps the Senate's outstanding authority on railroads and on transportation in general. Senator Reed's career, and his contributions to transportation legislation, are reviewed in the News section, page 58.

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**WHAT KIND OF RAILROADS?** Do the shippers of the United States want their railroads to continue as a privately owned industry, to become publicly owned, or to pass into a "twilight zone" halfway between the two? That question was bluntly put to the Associated Traffic Clubs at Houston, Tex., on October 25 by Fred G. Gurley, president of the Santa Fe. Despite the fact that his audience included operators of trucks, barges, and private transport systems, Mr. Gurley did some courageously plain talking about the evils of subsidized highway, waterway, air and parcel post competition. See page 54 for an abstract of his remarks.

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**"NEED FOR PUBLIC AWAKENING":** The week before Mr. Gurley spoke at Houston, R. J. Morfa, chairman of the Missouri-Kansas-Texas, made an equally frank address on the same general subject at Fort Worth. Excerpts from his talk appear on page 49.

---

**SANTA FE YARD:** Beginning on page 44 is the second and concluding installment of a two-part description—Part I of which appeared in last week's *Railway Age*—of the Atchison, Topeka & Santa Fe's enlarged and modernized hump retarder classification yard at Argentine, Kan.

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**A.S.M.E. MEETING:** The program for the New York meeting, November 29-December 1, of the Railroad Division of the American Society of Mechanical Engineers appears in the Organization News column.

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**AUGUST BUYING:** On pages 42 and 43 is the monthly summary, for and through August, of railroad purchases of rail, ties, fuel, equipment and other materials and supplies.

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**THE BROOKINGS STUDY:** Our leading editorial this week covers two "relatively subordinate" points in which we disagree with the recent and valuable Brookings Institution study of "National Transportation Policy." But, the editorial also points out, the study as a whole is one of unquestioned intelligence, integrity, honesty and objectivity —which should be helpful in formulating and guiding the business opinion which is the active factor in determining legislative and regulatory policies toward the railroads.

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**RICE HEADS I.C.C. PRACTITIONERS:** Roland M. Rice, assistant general counsel of the A.A.R., was elected president of the Association of Interstate Commerce Commission Practitioners at the organization's recent New York meeting, which was featured by a forum discussion on transportation policy. See the News section.

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**MORE DIESELS FOR P.R.R.:** The Pennsylvania this week announced one of the largest locomotive orders in railroad history—226 Diesel-electrics, freight, passenger and switching, at a total cost of some $38,000,000. The new locomotives, which are to be delivered between January and August of next year, will be produced by six different builders.

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**STEAM LOCOMOTIVE MAINTENANCE:** Despite the rapidly increasing use of Diesel-electric motive power, steam locomotives still haul a vast amount of traffic—enough to make the efficiency, maintenance cost and availability of steam power a matter of prime importance to many railroads. How the Chicago & North Western has changed the design and shopping procedures of its heavy 4-8-4's and 4-6-4's to obtain nearly 90 per cent availability, at a maintenance cost of less than 20 cents per mile, is told in the illustrated article which begins on page 38.

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**NEW RAILS TO THE NORTH:** With modern machinery, communications and construction methods, railroad building will probably never again be attended by such adventure, excitement and danger as marked the transcontinental passage of lines like the Union Pacific and the Canadian Pacific. But the advance of steel rails into virgin territory still carries with it an aura of romance that is all its own—different, somehow, from that attending any other human activity. And such romance is coming again into its own out in British Columbia, where the Pacific Great Eastern is on the march to the north. Present plans, as related in the article on page 50, call for actual construction only of a comparatively modest 80-odd miles, but the same article, and reports from Ottawa summarized in the News section, make it plain that the line will eventually be extended much farther north. And it may finally become part of the proposed rail line to Alaska which, if it is ever undertaken, would assuredly rank as one of the greatest railroad construction projects of all time.

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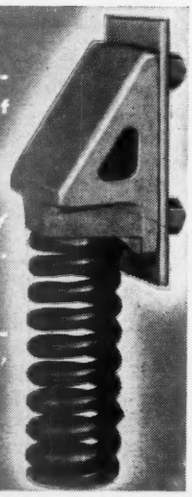

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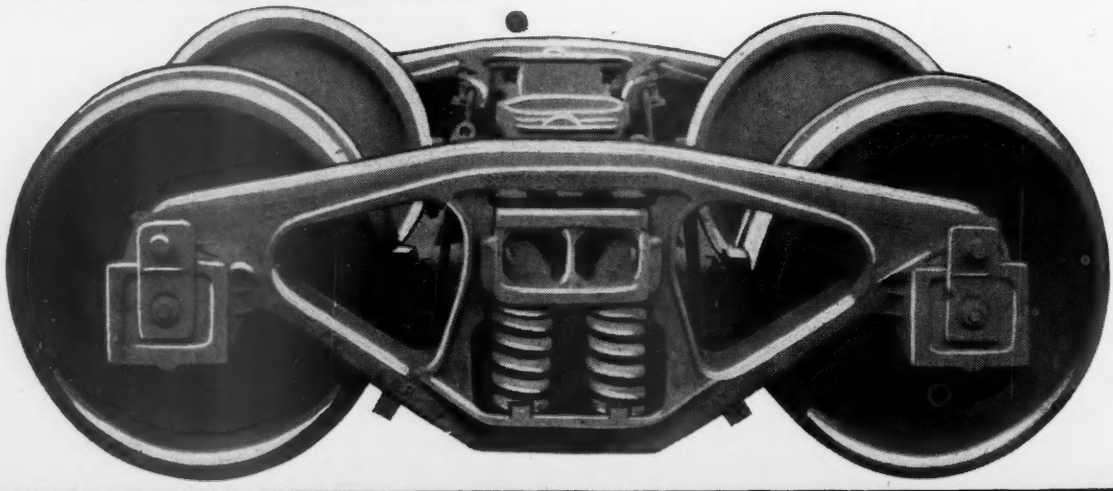

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# Compulsory Consolidation and Partial Public Ownership?

There has been made available to the officers primarily concerned on most railroads a survey of opinion about the railroads, conducted among top executives of large industry. The president of at least one important railroad has called in his principal assistants and has read this report to them. It would certainly be all to the good if this act should be duplicated on every railroad in the country, because *there is no harm being done to the railroads which does not have its origin with business men and business opinion.* It follows that no progress can be made in correcting the peculiar difficulties which afflict the railroads unless the business community can be "sold" (1) on the desirability, in its selfish interest, that the political handicaps to railroad prosperity be removed, and (2) on the specific legislative and regulatory steps necessary to the elimination of these burdens.

### *Business Opinion Is What Really Counts*

Even if the amorphous "general public" could be aroused, by superior railroad service and "public relations," to the most actively favorable attitude toward the railroads of which it is capable—such friendly interest could accomplish nothing against continued hostility or apathy on the part of business interests. Business opinion—be it informed or ignorant, friendly or unfriendly, or just coldly neutral —is the *active factor* in determining legislative and regulatory policy toward the railroads; the state of general public opinion cannot in the nature of things be more than a remote influence. The reason, of course, is that the economic interest of most business is heavily involved in the national policy toward transportation—whereas most anonymous citizens have only a minor interest that they are able to recognize in government treatment of transportation, whether for good or ill.

Centuries ago it was wisely written: "Where your treasure is, there will your heart be also." Business has plenty of treasure involved in national policy toward transportation; the "little fellow" has, as far as he knows, comparatively little.

Where can effective arguments be found with which to awaken business to its selfish interest in a solution—in accord with the principles of private enterprise—to the present chaos in national policy toward transportation? This subject was discussed in this space in our last week's issue, the effort there being made to offer some practical and specific suggestions. Another source, of unquestionable intelligence and integrity, is the volume entitled "National Transportation Policy," published by the Brookings Institution and reviewed in this space in our October 29 issue. In the light of this paper's

generally favorable comment on that work, we have been asked whether we subscribe to all its recommendations.

### *How to Provide "Basic Rail Facilities"?*

The answer is that we do not. For example, the Brookings study suggests the possibility—in order to equalize competitive conditions between the railroads and agencies of transportation which operate on government-owned property—that the government might provide "basic railroad facilities for lease to private operators." There is no denying that conditions of capital supply for the transportation industry *must* be equalized as between the various agencies—and, if this equalization cannot be achieved by eliminating subsidies to highway and water carriers, then it will inevitably come about that parallel railroad operations will have to be subsidized too.

But it is not in the slightest degree necessary that such subsidization take the form of direct government ownership of "basic railroad facilities." A precedent has been established in federal financing of the elimination of railway grade crossings which should be applicable to any improvements the government might wish to make in railroad facilities. In the case of such grade crossing eliminations, the money was advanced by the government but the work was done under railroad direction, with the provision that *no part of the funds so received from the government be included in the book value of the railroads on which they are, theoretically, entitled to demand a "fair return."* Following this precedent, why would it not be entirely practicable for the government to advance the funds required for any fixed-property improvement needed, in the public interest, by any railroad—always with the provision that funds so advanced must not be capitalized by the railroad, nor added to the rate-base value? With railroad rates subject to regulation, any profit earned by the railroads over and above a fair return (government investments excluded) is automatically passed on to the patrons in lower rates. Government money spent on improving railroad property would, in short, be passed along inevitably to the users of railway service, in exactly the same manner that government expenditures on highways and waterways are passed along to users of these facilities.

The only sound policy toward transportation is to eliminate all subsidies—but, if the subsidy policy is to be continued, then it is obviously not at all necessary, as the Brookings investigators appear to believe, that the desperate expedient of government ownership of "basic railroad facilities" be adopted in order to subsidize railroad patrons. They can, on the contrary, be quite conveniently and certainly subsidized under firmly established precedents, with the ownership of railroad property remaining in private hands exactly as at present.

Another point wherein we question the wisdom of the Brookings study is in its insistence upon compulsory consolidation. There is a great deal to be said for removing all the political handicaps—including, possibly, managerial inertia in some places—which stand in the way of any improvement in organization which may bring greater economy in railroad operation. This is quite a different thing from compulsory consolidation, which seems to be a kind of rabbit's foot, guaranteed to ward off the rheumatics of obsolescence and the spooks of competition. Any observant railroader can name instances of weak roads, taken in consolidation by stronger companies under pressure, which ought instead to have been abandoned. It is easy, too, to name roads now doing relatively well as local enterprises, which would go hopelessly into the "red" if the attempt were made to operate them under "standard" rules. It will be time enough to consider enforcing consolidation when the arbitrary political influences which make it impracticable on a voluntary basis have been removed.

These differences of ours with two relatively subordinate recommendations of the Brookings study in no way vitiate our respect for the document as a whole. On the contrary, if anything, they increase assurance in the honesty and objectivity of the work—because they afford the best possible evidence that the authors were not influenced by any special interests, but only by their conception of the public interest. There have been entirely too many yes-men and issue-dodgers and obscurantists in the allegedly disinterested research so far undertaken into transportation, heretofore conducted largely under official governmental auspices. It is heartening, at last, to see a study which avoids such gross evils, even if it does fall a little short of perfection.

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## REWARD FOR THEFT

An award of the National Railroad Adjustment Board's first division has ordered reinstatement and back pay for a passenger conductor discharged nearly two years earlier on the charge of putting fares in his own pocket.

Referee Joseph M. Klamon, a faculty member of Washington University at St. Louis, upheld the defendant's claim, because, in his opinion, the evidence did not clearly establish the validity of the charge. He reached this decision in the face of a record of evidence, according to a lengthy dissent filed by the board's carrier members, which substantiate the railroad's assertion that the conductor had:

(1) In a four-month period, reported only one-seventh of the number of cash fares which he collected;

(2) During the same period, accounted for less than 10 cents out of each $1 of cash collected;

(3) Manipulated cash fare receipts so as to disguise actual collections; and
(4) In many instances collected cash fares without issuance of any receipts, or without reporting or accounting for the collections at all.

The conductor involved was assigned to a local train operating between Virginia, Minn., and Iron Junction, on the Duluth, Missabe & Iron Range. The discrepancy in his cash returns was first noted by the accounting office, which observed that, during the first four months of 1947, he turned in an average of only 32 cents a day, while relief conductors working the same job turned in an average of $2.08. The services of an outside agency were, therefore, engaged, and four investigators rode this conductor's trains on three different dates and submitted statements averring that the suspected irregular practices of the employee did exist.

In his decision, Referee Klamon appears to have placed great weight on an alleged delay in prosecuting the conductor. In his award (No. 12918 of August 9, 1949), Mr. Klamon finds, in part, as follows:

This is the claim of Conductor *Blank* for reinstatement with seniority unimpaired and pay for time lost after dismissal as a result of the investigation conducted on August 27, 1947.

The charge in this case, involving misappropriation of funds on the part of a conductor with approximately 43 years of service, is extremely serious. In order for the discharge to be sustained, it is necessary that the charge be clearly substantiated. The long delay in proceeding against this conductor on the part of the carrier would itself appear to evidence considerable lack of conclusive evidence, particularly in view of the nature and character of the testimony of the special agents upon whose testimony the discharge was predicated.

The "long delay" to which Referee Klamon refers, the carrier members' dissent points out, was a period of less than two months. Had the delay been longer, or shorter, it does not appear that the evidence would have been in any way altered. No question or objection to the "delay" was voiced at the investigation held on the property prior to the employee's dismissal.

Objections raised by the defendant were based strongly on the fact that two of the special agents who testified at the investigation said that the general chairman — who reportedly attended the hearing in uniform — looked like the defendant. whom they had seen only in uniform. In any case, the conductor's punch mark in altered fare receipts would appear to involve him in at least some of the alleged "knock downs."

The referee's decision discourages the enforcement of disciplinary measures experience has indicated are necessary to protect against carelessness in handling of railway revenues. It is hard to see how such a decision can fail to invite a return to such conditions as those of the 1880's when passenger conductors, if old-timers' reports are to be credited, used the right-hand pocket for the company and the left-hand pocket for themselves, sometimes making a rather liberal decision in favor of the latter, when it came to dividing their collections.

# THE DIESEL IN THE STEAM ENGINEHOUSE

The railroads have learned from their cumulative experience with Diesel power that high-grade servicing and repair facilities are essential to the economical employment of this type of locomotive. Such facilities have been provided in some cases by building an entirely new structure designed specifically both inside and out for the handling of Diesels; elsewhere portions of existing roundhouses have been converted for this purpose. This latter practice has a serious drawback, which may more than offset the economy realized by converting an old building instead of building a new one, specifically designed to serve its purpose.

Even if the existing steam roundhouse is reasonably well adapted to efficient Diesel servicing after conversion, and even if the possibility of fire is no greater in the old than in a new building, the risk of serious financial loss from a fire is, nevertheless, increased many times. Where more than two or three stalls are used for the handling of Diesels, the time consumed in getting any appreciable number of such units out of a burning building over a single turntable could conceivably be long enough to cause serious and expensive damage to those locomotives that could not immediately be moved.

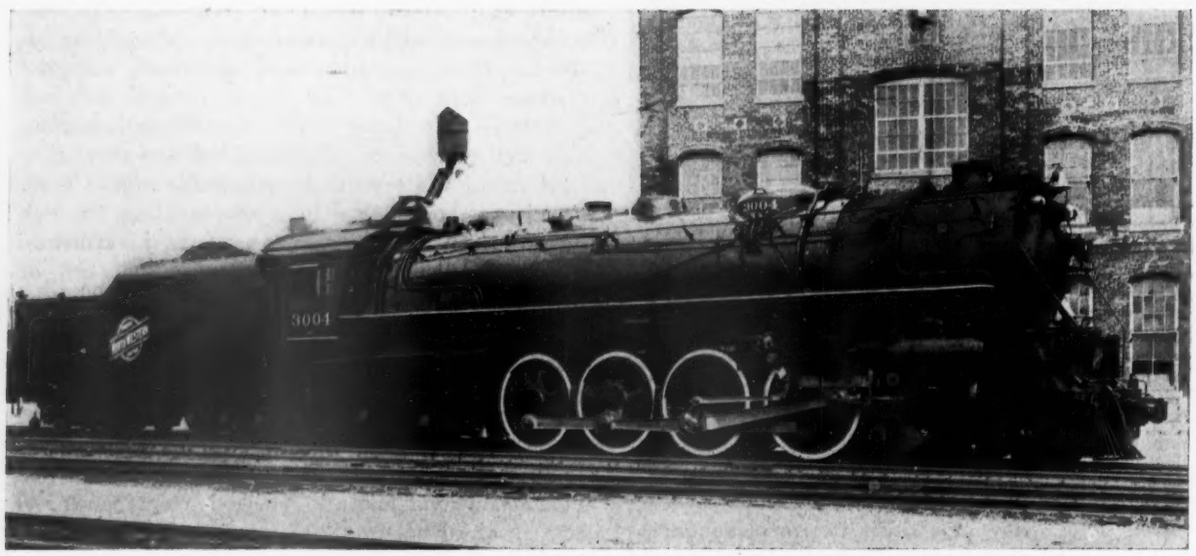
In most cases the original conversion of a portion of a steam roundhouse to a Diesel maintenance section involved but one, two or three stalls and was used when and where the number of Diesel locomotives was small. Where the conversion could be made in such a manner that the work on Diesel power could be performed efficiently, such conversions were sound policy. There is not a great deal of risk from fire where only one or two units need be removed.

Danger lies in the continued and creeping expansion of such Diesel maintenance sections to four and five and more stalls.

Roundhouses are obsolete enough for most steam-locomotive servicing work because of the inevitable turntable delays and the need for continued movement of men and tools from one stall to another; for Diesel power these disadvantages apply more forcibly because of the far greater cost of this type of locomotive, with the consequent need for minimizing repair and service time. With road power there is the further disadvantage of having to split up units, an awkward procedure which increases both out-of-service time and handling cost. When, to these disadvantages of utilizing existing roundhouses, is added the seriously increased risk of substantial fire damage to motive power worth a million or more dollars, there is good cause to wonder whether a new and more efficient servicing arrangement might not be far cheaper in the long run.

# IMPROVEMENT OF POWER—— MODERNIZATION OF REPAIR METHODS

# Save Money on C. & N. W.




In 1946 the Chicago & North Western began a program of completely modernizing a group of heavy 4-8-4 combination freight and passenger locomotives*, and improving repair practices during shopping, principally through the use of a transit for layout. The result has been a saving in maintenance cost alone which repaid the cost of modernization in less than three years. Over and above the saving in maintenance, the railroad has realized a substantial increase in capacity and availability, and a marked reduction in fuel consumption. The locomotives now go 400,000 miles between Class 3 repairs, and neither receive nor require Class 5 repairs between Class 3's. Their availability averages about 90 per cent. The cumulative maintenance cost on the 23 4-8-4's modernized to date has averaged 19.8 cents per mile for the period between April, 1946, when the first locomotive was modernized, and June, 1949.

The second class of locomotives to which important design and shopping procedure changes were made was the Class E-4 heavy 4-6-4 passenger locomotives. Six of the nine in the group received new welded boilers, all were converted to oil burners, and a procedure was instituted for laying out the frame and running gear with a transit. Individual locomotives in this group have averaged over 96,000 miles between Lidgerwooding of tires.

The 4-8-4's were part of a group of 35 Class H locomotives built by Baldwin in 1929. As modernized, they are designated Class H-1, and carry 275 lb. boiler pressure, have a total weight on drivers of 288,000 lb., develop 84,200 lb. tractive force, including booster, have 76-in. drivers and cylinders 27 in. by 32 in. The E-4 4-6-4's were built by the American Locomotive Company in 1938 with 84-in. drivers, 300 lb. boiler pressure, 55,000 lb. tractive force, 216,000 lb. on drivers, and cylinders 25 in. by 29 in.

### *Principal Changes*

Among the principal changes made during modernization of the H's were new cast-steel beds, enlargement and streamlining of steam and exhaust ports, roller bearings on all axles, lightweight reciprocating parts, larger boiler tubes, flues and superheater units, the application of two new Thermic syphons in the firebox and two in the combustion chamber, an all-welded firebox and tuyere-type grates. The beneficial effect of the modernization plus careful maintenance, including the use of a transit for precision laying-out of the frame, shoes and

*For a description of the modernization, see *Railway Age* of April 27, 1946, page 860.

***Heavy 4-8-4's have an availability near 90 per cent and a maintenance cost less than 20 cents per mile***

wedges, guides and rods, and for alining engine and trailer trucks, has resulted in some outstanding records of wear, typical of which is the following data on locomotive 3004, which has completed over 300,000 miles of service and has undergone its third annual inspection:

1. The valve and cylinder bushings were in excellent condition. It was not necessary to bore either the valve or cylinder bushings during the three years of service. The cylinders still used 27-in. diameter packing. Evidence to date is that these bushings will go the entire term of service of the 3004.

2. The same shoes and wedges were still on the 3004 that were placed there in April, 1946, when the locomotive was modernized. These shoes and wedges have made 300,000 miles. By using oversize floating plates at the second and third drivers the shoes and wedges give evidence of going the full term of service.

3. The crank pins at the second, third and fourth wheels are three years old and have run 300,000 miles. Sufficient stock remains on them to bring them into quarter and run for at least another year. The crank pins are put in 1/16 in. oversize, and are allowed to wear up to ¼ in. undersize. A good grade of regular 0.4 per cent carbon steel is used in the crank pins. The tentative mileage for renewal due to fatigue limits is 350,000. It is expected that all pins will last to the 400,000 mile term-of-service limit.

4. Locomotive 3004 was equipped with bronze-lined steel valve guides. These guides were in good condition and are suitable for another year of service. The main multiple-bearing guides have a total penetration, or bearing height, of 4¾ in. on each side for lateral stability. The crossheads are made of cast manganese-vanadium steel with a tensile strength of 90,000 to 100,000 lb. per sq. in.

5. The Hulson tuyere-type grates will need very little attention for at least another year. A few tuyere elements only have been replaced on some locomotives.

From the examination of the machinery, the railroad considered that it was becoming more clearly evident that the limiting condition for a "term of service" for the 3004 would be the tube and flue removal period. The machinery held up well enough to last as long as the tubes and flues. If a tube and flue time extension appears advisable, the machinery might very well last a full five years, or 450,000 miles.

### General Wear Data

None of the lip-type cylinder packing has required replacement on the 23 H-1's converted to date, including the 3004 which has made 300,000 miles, the maximum for any of the modernized locomotives. A few segments only have been replaced in some of the locomotives. To date no H-1's have required 27⅛-in. packing, the next step size. The piston rod and valve-rod packing is renewed annually as a matter of course. No trouble has been experienced with blow-by.

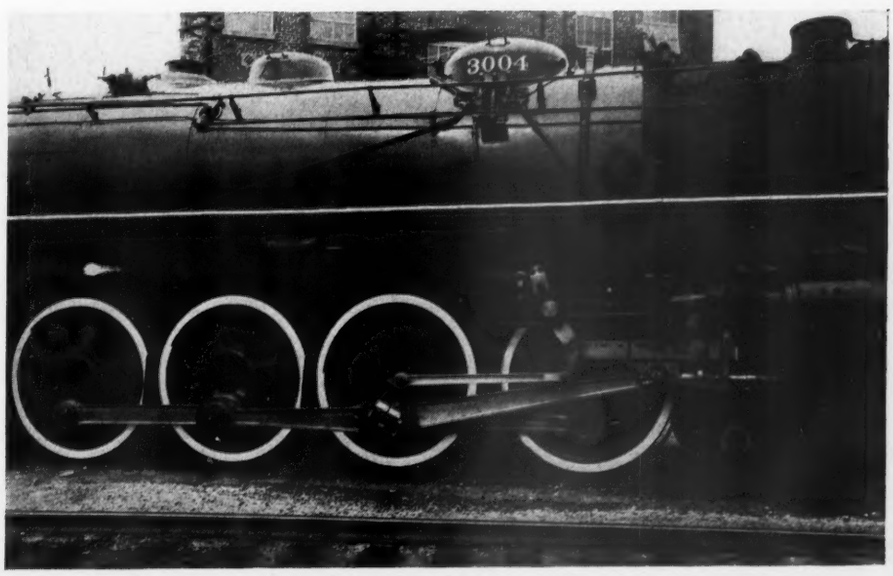
No valve or cylinder bushings have required reboring, even on the 3004 after three years and 300,000 miles of service. On the 3004, the valve bushings were not sufficiently out-of-round to cause any difficulty. Typical examples of cylinder and valve bushing wear on H-1's at different annual checks are shown in Table I.

The cross heads and guides on both the H-1's and the E-4's generally go from one annual to another before requiring any attention. Thus, rebabbitting of the guides is required only at 120,000 or more miles on the E-4's and at about 90,000 miles on the H-1's. When crossheads require rebabbitting, the job is done in a

**Table I — Representative Cylinder and Valve-Bushing Wear on Class H-1 Locomotives**

| Locomotives | Annual | Cylinder bushings, in. | | Valve bushing, in. | |
|---|---|---|---|---|---|
| | | Right | Left | Right | Left |
| 3004 | 2nd | 27.079 | 27.036 | 14.177 | 14.135 |
| | | 27.040 | 27.014 | 14.185 | 14.144 |
| 3032 | 2nd | 27.020 | 27.052 | 14.130 | 14.008 |
| | | 27.023 | 27.076 | 14.131 | 14.017 |
| 3009 | 1st | 27.082 | 27.053 | 14.016 | 14.016 |
| 3005 | 1st | 27.032 | 27.022 | 14.015 | 14.025 |
| 3013* | 1st | 26.985 | 27.000 | 14.001 | 13.997 |
| | | 27.026 | 27.046 | 14.016 | 14.045 |

*Worst found: bushings pitted, evidence of overtreated water




(Facing page) The completely modernized Class H-1 locomotives have an average availability of 89.2 per cent and a maintenance cost of 19.8 cents per mile

(Right) The machinery on the modernized 4-8-4's goes 400,000 miles between Class 3 repairs with no intermediate classified repairs

mandrel which casts the crosshead babbitt lining directly to a fit of .006 to .010 in. in the guide. No machining is required. Dowels are used to position the crosshead accurately. The rebabbitting can be done during the quarterly when the locomotive is to be out of service 24 to 30 hours.

To date the only crank pin that has required renewal on the 23 H-1's is the left front pin on the 3004. At the third annual inspection of the 3004, sufficient stock remained on the crank pins to bring them into quarter to run at least another year. A quartering circle is inscribed on the wheel hubs when the crank pins are first turned or ground, and the circle is used as a guide for future operations. Rod bushings are renewed at annual inspections, and to date there have been no H-1 locomotives tied up for bushing troubles.

The floating plates on the No. 1 and No. 4 drivers of the 3004 did not require any attention after 300,000 miles. The No. 2 and No. 3 plates were replaced with ⅛-in. oversize plates so that the original shoes and wedges could be used again. No work was required on any of the shoes and wedges; all were used again without any attention. The maximum rise of the wedges was about 1½ in. None stuck in service at any time.

The link-block slots on the H-1's are of flame-hardened S.A.E. 1045 steel, which has eliminated all troubles with this part. No link-block bodies have yet required renewal. There was less than 1/64 in. wear on the slot of the 3004 after two years of service. The link trunnions are force-feed oil lubricated and showed no signs of wear after three years.

The Baker valve gears on eight of the E-4's are equipped with needle bearings. The 4009 has had experimental Pilliod floating bushings that have been in service about 250,000 miles without showing wear.

## Low Fuel Consumption

A number of test runs were made with the 4-8-4's in both passenger and freight service to determine the fuel consumption. On one test the 3005 handled 4,207 tons between Chicago and Clinton, Iowa, a run of 130 miles, with 29,290 lb. of coal, or a fuel consumption of 53.6 lb. per 1,000 g.t.m. The coal used had a heat value of 11,086 B.t.u. per lb. With lighter trains varying from 2,100 to 2,760 tons, the fuel consumption ranged from 66.4 to 74.8 lb. per 1,000 g.t.m. The time required to make this run varied from 2 hr. 55 min. to 3 hr. 42 min. In passenger service, the 3005 handled 16 cars (1,230 tons) from Chicago to Omaha with 19 scheduled stops on 68,950 lb. of coal. This was at the rate of 8.8 lb. per car-mile for the 488-mile run.

**Table II—Comparison of Operating Efficiencies Between Original Class H and Modernized Class H-1 4-8-4's**

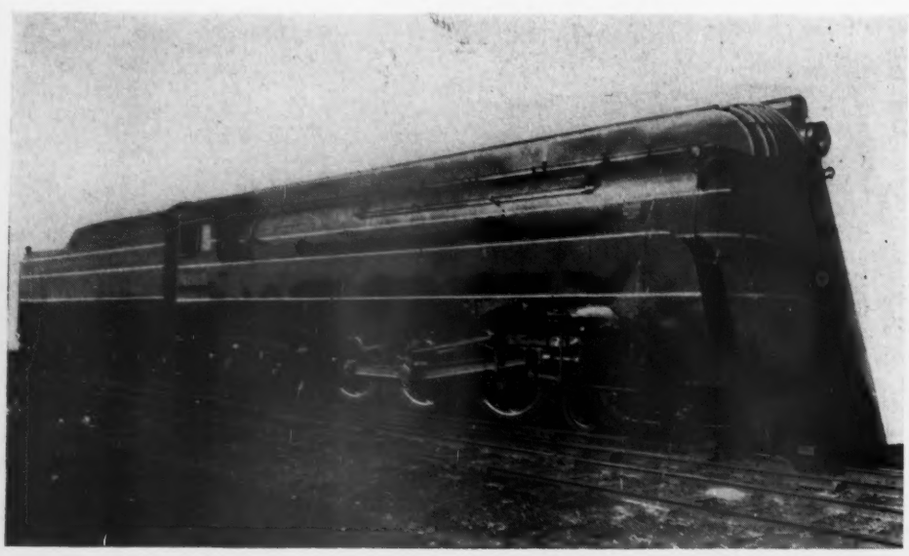
| | Class H 3001 | Class H-1 3004 |
|---|---|---|
| Evaporation, lb. water per lb. coal | 6.31 | 7.91 |
| Probable boiler efficiency, per cent | 56 | 62 |
| Average flue-gas temperature, deg. | 410 | 470 |
| Average superheat temperature, deg. | 630 | 660 |
| Coal, lb. per 1,000 g.t.m. | 102.4 | 76.3 |

Comparative tests between original Class H locomotive No. 3001 and rebuilt Class H-1 No. 3004 shows an increase in pound of water evaporated per pound of coal of 25½ per cent. The probable boiler efficiency increased from 56 to 62 per cent. Coal consumption per 1,000 g.t.m. decreased by one-fourth from 102.4 to 76.3 lb. per 1,000 g.t.m. Details of the comparison are shown in Table II.

## Improved Draft Arrangement

Several changes in the boiler and the front end contributed to the increase in efficiency. The 29 2-in. tubes were replaced by 2¼-in. tubes. The 3½-in. flues were replaced by 4-in. flues. An annular ported nozzle was applied, and the smoke-box table plate was raised 22 in. so that the area under the table plate was 162 per cent of the net gas area through the tubes and flues. Stacks with a 27-in. top diameter and a 20½-in. choke were substituted for those with a 19-in. choke and a 24-in. top diameter. These changes have made it possible to move more gas with less effort.

Three minor changes were made to the H-1's to simplify maintenance. To prevent cinder cutting in the top three rows of flues, 2-in. lengths of 3-in. tubing are welded in front of the return bend of the superheater units. This was tried out experimentally on the 3010, and has proved quite successful. It is expected to give the flues a life of five years. Syphon necks are opened



(Left) The use of a transit for laying out the frame and running gear has been a major factor in obtaining an average of over 96,000 miles between Lidgerwooding of tires on the 4003

(Facing page) The use of the transit to lay out the locomotive has greatly improved the life of the machinery on both the 4-8-4's and the 4-6-4's

at each annual by cutting, and then rewelded. The opening up and rewelding relieves the thermal stresses that have been built up within the syphon, and eliminates the tendency for the syphon to pull away from the throat.

The third change that has improved availability and reduced maintenance is the use of silico-manganese coil springs at the front of the front drivers and the rear of the rear trailer wheels in the spring equalizing system on the H-1's. On the E-4's, natural rubber snubbers are used at these locations. In both cases, the substitute was for A.A.R. Class G springs. Before the application of the silico-manganese springs and the rubber snubbers, the equalizer springs lasted about 30 days and required six hours to change. Both the silico-manganese springs and the rubber snubbers last from 18 to 24 months.

The silico-manganese springs on the H-1's have a travel of 3½ in. with a normal deflection of 1¾ in., and therefore have a margin of 1¾ in. before going solid.

The snubbers used on the E-4's are made of 40-durometer natural rubber.

### *Results of Transit Layout*

The transit method employed in laying out the frame, shoes and wedges, guides and rods, and for alining the engine and trailer trucks has improved the mileage between Lidgerwooding on the H-1's as shown in Table III. Mileages are also given for the E-4's, although data before the transit method was employed is not available.

As can be noted from the table, the mileage average between Lidgerwooding on the original H class was 25,991. On two of the H's, the 3012 and the 3017, the transit method was also employed and this mileage was raised to 34,144, an increase of one-third. On the H-1's, where both the transit was used and the modernization given, this mileage was increased to 52,203, or a little more than double the mileage on the locomotives as originally built and laid out by conventional methods. Individual H-1's have attained mileages as high as 115,000 while individual E-4's have attained as high as 96,581 miles. It is expected that the average mileage for the Class H-1 engines will increase beyond 52,203 as a number of recently shopped H-1 engines are still rolling up mileage to their first Lidgerwood and hence could not enter the picture as average miles.

**Table III—LIDGERWOOD INTERVALS, excluding flat spots, where reason was unknown, and the interval between the final Lidgerwooding to a set of tires and replacement by new tires**

| | |
|---|---|
| H | 25,991 |
| H (laid out with transit) | 34,144 |
| H-1 | 52,203 |
| E-4 excluding 4006 and 4007 | 73,759 |
| E-4 including 4006 and 4007 | 59,168 |
| Individual Locomotives: | |
| 3004 | 115,000 |
| 4003 | 96,581 |

In using the transit for checking the alinement of locomotive beds, getting a square line and the required thickness of the main shoes, and a proof line for the alinement of the guides, the bed is leveled and plumb bobs are dropped from the center of the engine-truck center pin, from the center of the trailer radius-bar pin hole, and over the center of the chafing iron.

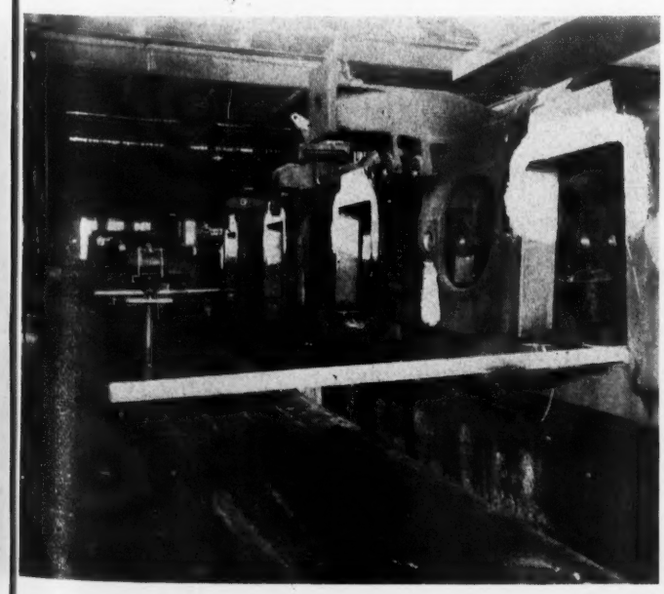
The alinement of the plumb lines is then checked with the transit in the pit. If these points do not all lie in the same line, the trailer-truck radius-bar fulcrum and the chafing iron are realined to conform to the line through the center of the engine-truck center pin and the center of the trailer radius-bar pin hole.

Pieces of 2-in. pipe are clamped against the shoe faces of the front jaws and against the wedge faces of the rear jaws. These pipes, which are adjusted to be level, extend out at least 7 ft. beyond the outer side of the frame on one side of the bed. From the center line of the locomotive, marked on the pipes between the two sides of the bed, a distance equal to one-half the cylinder-center spread, is trammed outward to the ends of the pipes and marked on them to establish a line outside the bed of the locomotive parallel to the center line of the bed. The inner edges of the shoes and wedges are located from the center of the bed with the transit still in the pit. In the case of roller bearings these measurements are critical.

The transit is then set up along side of the locomotive and alined in the center line of the cylinders, parallel to the center line of the locomotive bed, and turned to establish a line exactly 90 deg. to the cylinder center across the locomotive. With the one setting of the transit lines are scribed on both sides of the locomotive from which the shoes and wedges are located.

With this basic procedure the cylinder bore is checked for parallelism with the center line of the bed and proof center lines established on the guide ledges for alining multiple-wear guides. If the cylinders are not in line with the bed, a line is drawn up the front and back of the guide ledges which is prick-punch marked for a permanent guide center. This line is used to determine the correction necessary when reboring the cylinders.

The job is completed by laying off the cylinder striking distance, or main rod length, to determine the center of the main box. Other rod lengths are determined by tramming front and back from the front face of the main jaw.



# Rail and Tie PURCHASES Exceed 1948

***August fuel and tie buying up from July—Decline in inventories continues***

**1949 RAILWAY PURCHASES***

| | August (000) | Eight Month Totals 1949 (000) | Eight Month Totals 1948 (000) |
|---|---|---|---|
| Equipment** | $ 1,983 | $ 98,037 | $503,905 |
| Rail | 9,997 | 77,876 | 61,404 |
| Crossties | 7,826 | 63,362 | 51,987 |
| Other Material | 67,907 | 703,605 | 762,627 |
| Total from Manufacturers | $87,713 | $942,880 | $1,379,923 |
| Fuel | 41,024 | 406,471 | 556,574 |
| Grand Total | $128,737 | $1,349,351 | $1,936,497 |

* Subject to revision
**Amount placed on order

In August, 1949, the Class I railroads of the United States spent more than $126,000,000 for materials, supplies and fuel, and in addition they ordered new equipment of which the estimated cost is $1,983,000. August purchases and equipment orders brought the total for the first 8 months of the year to $1,349,351,000, which, reflecting the precipitate drop in car orders, is a decrease of more than 30 per cent from the figure for the similar period in 1948. Purchases of manufactured materials and supplies other than fuel and equipment, however, were only about $31 million below similar expenditures last year. Rail and tie purchases, which were considerably higher than those last year in the same period, have contributed a great deal to keeping these purchases at this relatively high level.

For the fourth consecutive month, the total value of inventories has declined as the railroads have dipped into their stores stocks. Since April 1 the value of these inventories has dropped by almost $58 million, or 6 per cent.

The estimated $1,983,000 earmarked in August for equipment will be spent for 185 freight cars, whose estimated cost is $780,000, and for 10 Diesel-electric locomotive units, to cost approximately $1,203,000. In addition, August saw the Norfolk & Western order for one steam-turbine electric locomotive for which there are no cost figures available.

**AUGUST* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)**

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| 1943 | $75,266 | +14 |
| 1944 | 90,831 | — 6 |
| 1945 | 87,342 | — 2 |
| 1946 | 93,522 | — 8 |
| 1947 | 104,657 | —18 |
| 1948 | 115,562 | —26 |
| 1949 | 85,730 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. | $114,861 | —25 |
| Feb. | 109,317 | —22 |
| Mar. | 118,808 | —28 |
| Apr. | 111,742 | —23 |
| May | 106,593 | —20 |
| June | 103,429 | —17 |
| July | 94,363 | — 9 |
| Aug. | 85,730 | |

| Year | Eight Month Totals '49 And Other Years (000) Amt. | % Change |
|---|---|---|
| 1943 | $539,194 | +57 |
| 1944 | 682,591 | +24 |
| 1945 | 658,010 | +28 |
| 1946 | 634,031 | +33 |
| 1947 | 815,920 | + 4 |
| 1948 | 876,018 | — 4 |
| 1949 | 844,843 | |

**AUGUST* PURCHASES OF RAIL**

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| 1943 | $4,396 | +127 |
| 1944 | 6,358 | + 57 |
| 1945 | 5,977 | + 67 |
| 1946 | 6,634 | + 51 |
| 1947 | 7,625 | + 31 |
| 1948 | 9,218 | + 8 |
| 1949 | 9,997 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. | $7,361 | +36 |
| Feb. | 8,637 | +16 |
| Mar. | 10,264 | — 3 |
| Apr. | 10,818 | — 8 |
| May | 9,807 | + 2 |
| June | 9,997 | —— |
| July | 10,995 | — 9 |
| Aug. | 9,997 | |

| Year | Eight Month Totals '49 And Other Years (000) Amt. | % Change |
|---|---|---|
| 1943 | $35,961 | +117 |
| 1944 | 51,213 | + 52 |
| 1945 | 48,625 | + 60 |
| 1946 | 36,500 | +113 |
| 1947 | 57,308 | + 36 |
| 1948 | 61,404 | + 27 |
| 1949 | 77,876 | |

**AUGUST* PURCHASES OF CROSSTIES**

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| 1943 | $8,156 | — 4 |
| 1944 | 7,532 | + 4 |
| 1945 | 6,594 | +19 |
| 1946 | 8,032 | — 3 |
| 1947 | 9,300 | —16 |
| 1948 | 9,118 | —14 |
| 1949 | 7,826 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. | $7,859 | —— |
| Feb. | 7,095 | +10 |
| Mar. | 8,362 | — 6 |
| Apr. | 8,159 | — 4 |
| May | 8,065 | — 3 |
| June | 8,600 | — 9 |
| July | 7,396 | + 6 |
| Aug. | 7,826 | |

| Year | Eight Month Totals '49 And Other Years (000) Amt. | % Change |
|---|---|---|
| 1943 | $50,963 | +24 |
| 1944 | 57,691 | +10 |
| 1945 | 47,241 | +34 |
| 1946 | 58,460 | + 8 |
| 1947 | 66,392 | — 5 |
| 1948 | 51,987 | +22 |
| 1949 | 63,362 | |

*Subject to revision

## AUGUST* PURCHASES OF OTHER MATERIAL

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| 1943 | $62,714 | + 8 |
| 1944 | 76,941 | —12 |
| 1945 | 74,771 | — 9 |
| 1946 | 78,856 | —14 |
| 1947 | 87,732 | —23 |
| 1948 | 97,226 | —30 |
| 1949 | 67,907 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. | $99,641 | —32 |
| Feb. | 93,585 | —27 |
| Mar. | 100,182 | —32 |
| Apr. | 92,765 | —27 |
| May | 88,721 | —23 |
| June | 84,832 | —20 |
| July | 75,972 | —11 |
| Aug. | 67,907 | |

| Year | Eight Month Totals '49 And Other Years (000) Amt. | % Change |
|---|---|---|
| 1943 | $452,270 | +56 |
| 1944 | 573,687 | +23 |
| 1945 | 562,144 | +25 |
| 1946 | 539,071 | +31 |
| 1947 | 692,220 | + 2 |
| 1948 | 762,627 | — 8 |
| 1949 | 703,605 | |

## AUGUST* PURCHASES OF FUEL

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| 1943 | $45,403 | —10 |
| 1944 | 47,954 | —14 |
| 1945 | 45,402 | —10 |
| 1946 | 49,419 | —17 |
| 1947 | 56,585 | —28 |
| 1948 | 70,425 | —42 |
| 1949 | 41,024 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. | $65,089 | —37 |
| Feb. | 57,530 | —29 |
| Mar. | 57,760 | —29 |
| Apr. | 49,848 | —18 |
| May | 52,391 | —22 |
| June | 45,403 | —10 |
| July | 37,426 | +10 |
| Aug. | 41,024 | |

| Year | Eight Month Totals '49 And Other Years (000) Amt. | % Change |
|---|---|---|
| 1943 | $351,199 | +16 |
| 1944 | 401,397 | + 1 |
| 1945 | 374,618 | + 9 |
| 1946 | 354,768 | +15 |
| 1947 | 435,845 | — 7 |
| 1948 | 556,574 | —27 |
| 1949 | 406,471 | |

## AUGUST* TOTAL PURCHASES (Excl. Equip.)

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| 1943 | $120,669 | + 5 |
| 1944 | 138,785 | — 9 |
| 1945 | 132,744 | — 5 |
| 1946 | 142,941 | —11 |
| 1947 | 161,242 | —21 |
| 1948 | 185,987 | —32 |
| 1949 | 126,754 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. | $179,950 | —30 |
| Feb. | 166,847 | —24 |
| Mar. | 176,568 | —28 |
| Apr. | 161,590 | —22 |
| May | 158,984 | —20 |
| June | 148,832 | —15 |
| July | 131,789 | — 4 |
| Aug. | 126,754 | |

| Year | Eight Month Totals '49 And Other Years (000) Amt. | % Change |
|---|---|---|
| 1943 | $ 890,393 | +41 |
| 1944 | 1,083,988 | +15 |
| 1945 | 1,032,628 | +21 |
| 1946 | 988,799 | +27 |
| 1947 | 1,251,765 | —— |
| 1948 | 1,432,592 | —13 |
| 1949 | 1,251,314 | |

*Subject to revision

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## AUGUST* INVENTORIES OF RAIL

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| Aug. 1, 1943 | $19,035 | +95 |
| 1944 | 23,190 | +60 |
| 1945 | 26,332 | +41 |
| 1946 | 24,205 | +54 |
| 1947 | 28,509 | +30 |
| 1948 | 30,005 | +24 |
| 1949 | 37,162 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. 1 | $33,243 | +12 |
| Feb. | 36,408 | + 2 |
| Mar. | 39,054 | — 5 |
| Apr. | 42,681 | —13 |
| May | 41,264 | —10 |
| June | 38,365 | — 3 |
| July | 36,486 | + 2 |
| Aug. | 37,162 | |

## AUGUST* INVENTORIES OF CROSSTIES

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| Aug. 1, 1943 | $57,536 | +61 |
| 1944 | 75,004 | +23 |
| 1945 | 66,422 | +39 |
| 1946 | 78,698 | +18 |
| 1947 | 86,066 | + 7 |
| 1948 | 77,952 | +19 |
| 1949 | 92,476 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. 1 | $94,256 | — 2 |
| Feb. | 94,164 | — 2 |
| Mar. | 98,833 | — 6 |
| Apr. | 101,987 | — 9 |
| May | 101,641 | — 9 |
| June | 94,615 | — 2 |
| July | 96,167 | — 4 |
| Aug. | 92,476 | |

## AUGUST* INVENTORIES OF OTHER MATERIAL

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| Aug. 1, 1943 | $376,295 | +63 |
| 1944 | 422,002 | +45 |
| 1945 | 449,821 | +36 |
| 1946 | 458,774 | +38 |
| 1947 | 558,119 | +10 |
| 1948 | 614,271 | —— |
| 1949 | 613,685 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. 1 | $611,864 | —— |
| Feb. | 626,423 | — 2 |
| Mar. | 636,700 | — 4 |
| Apr. | 647,641 | — 5 |
| May | 642,872 | — 5 |
| June | 634,929 | — 3 |
| July | 623,281 | — 2 |
| Aug. | 613,685 | |

## AUGUST* INVENTORIES OF SCRAP

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| Aug. 1, 1943 | $9,258 | +72 |
| 1944 | 9,682 | +65 |
| 1945 | 9,280 | +72 |
| 1946 | 11,460 | +39 |
| 1947 | 9,881 | +61 |
| 1948 | 14,857 | + 7 |
| 1949 | 15,939 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. 1 | $18,849 | —15 |
| Feb. | 18,735 | —15 |
| Mar. | 18,532 | —14 |
| Apr. | 18,872 | —16 |
| May | 17,936 | —11 |
| June | 16,877 | — 6 |
| July | 16,535 | — 4 |
| Aug. | 15,939 | |

## AUGUST* INVENTORIES OF FUEL

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| Aug. 1, 1943 | $58,216 | +30 |
| 1944 | 64,515 | +18 |
| 1945 | 56,248 | +35 |
| 1946 | 46,625 | +63 |
| 1947 | 56,135 | +35 |
| 1948 | 86,636 | —12 |
| 1949 | 75,954 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. 1 | $96,900 | —22 |
| Feb. | 91,831 | —17 |
| Mar. | 88,647 | —14 |
| Apr. | 82,014 | — 7 |
| May | 81,686 | — 7 |
| June | 83,436 | — 9 |
| July | 81,567 | — 7 |
| Aug. | 75,954 | |

## AUGUST* TOTAL INVENTORIES†

| Year | August '49 Compared to Other Augusts (000) Amt. | % Change |
|---|---|---|
| Aug. 1, 1943 | $520,340 | +61 |
| 1944 | 594,393 | +41 |
| 1945 | 608,103 | +38 |
| 1946 | 619,762 | +35 |
| 1947 | 738,710 | +13 |
| 1948 | 823,721 | + 1 |
| 1949 | 835,216 | |

| Month | August '49 Compared to Other Months '49 (000) Amt. | % Change |
|---|---|---|
| Jan. 1 | $855,112 | — 2 |
| Feb. | 867,561 | — 4 |
| Mar. | 881,766 | — 5 |
| Apr. | 893,195 | — 6 |
| May | 885,399 | — 6 |
| June | 868,222 | — 4 |
| July | 854,036 | — 2 |
| Aug. | 835,216 | |

*Subject to revision

†All total inventory figures taken from I.C.C. statement M-125 for the month indicated

# SANTA FE Revamps Its Largest FR

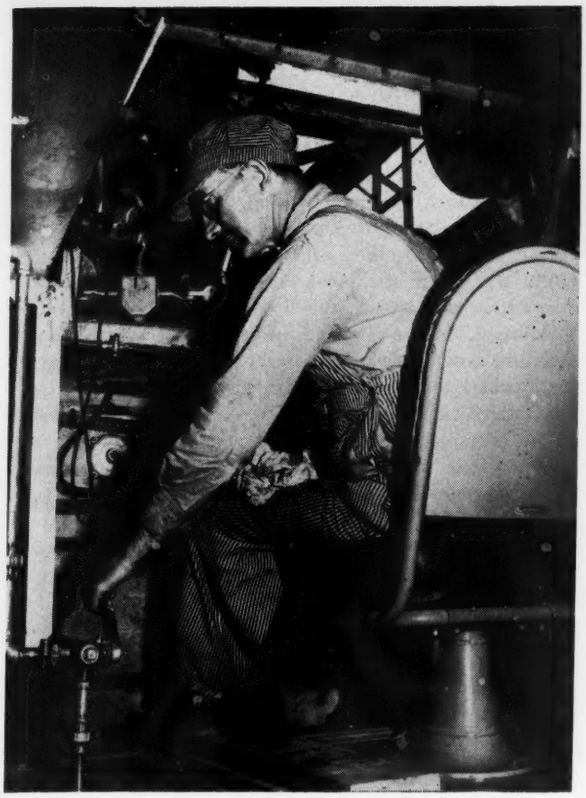
**[Part I of this article, published last week, outlined the benefits the Santa Fe expects to realize from its new 56-track hump-retarder yard at Argentine (Kansas City), Kan., described the general arrangement and operation of the new and improved facilities, including the receiving and departure yards, mentioned some of the more important features of the hump and classification yard, and told of the large amount of non-railroad work required as part of this project.—EDITOR]**

Buildings in the hump area, in addition to the three control towers, include a building for the hump conductor at the crest of the hump and a tower-office for the humpmaster, which is opposite the first retarder location. The latter two buildings are of conventional brick and concrete construction, but the three control towers are distinctly unusual. Since it was thought that fully inclosed towers of the usual type would prevent the humpmaster from having a clear view of the entire retarder area, a form of construction was chosen which consists of a skeleton steel supporting structure topped by a cabin for the operator. The cabins have flat roofs with wide overhanging eaves, and, except for large window areas on three sides, have exterior and interior walls of Transite. The operators' quarters are reached by spiral stairways. A feature of the interior appointments in each operator's office is a sealed-beam bulb with a blue lens, which, when used to illuminate the operator's desk at night, casts a soft blue light that presents no interference with vision through the windows.

Another structure in the hump area is a service building, of brick and concrete construction, which houses two oil-burning boilers that supply steam for heating all the buildings at the hump; two motor-driven Chicago Pneumatic compressors, each with a capacity of 670 cu. ft. per min; repair shops for the electricians and signal repairman; and toilets for employees.

### *Inspection Pit*

For the thorough inspection of the undersides of cars immediately before they are humped, an under-track inspection pit was constructed on the lead track to the hump. This pit, of concrete with a frame inclosure for an entryway on each side, houses the inspector who sits in a swivel chair and looks downgrade at the cars as they are approaching. If he wishes the inspector can pivot his chair to take another look at a car after it has passed overhead. The inspector sees the undersides of the cars through a window of shatterproof glass which is kept clean on the outside by an air-operated wind-



All photos courtesy Santa Fe Railway

**(Facing page) The control towers were built with skeleton supporting structures to interfere as little as possible with the humpmaster's view of the retarder operations**

**(Left) Hump pit inspector, in the undertrack inspection pit on approach track to hump, operates control lever for the whitewash spray as he spots a bad-order car**

**(Above) Oil is injected into journal boxes as cars pass up the approach track to the hump. Another oiler is stationed on the other side of the track**

# FREIGHT YARD—Part II

shield wiper. Floodlights illuminate the undersides of the cars.

Convenient to the inspector in the pit is a lever by means of which he can cause whitewash to be sprayed on a wheel of cars on which defects are detected. Other equipment in the pit includes a telephone and an intercommunication unit that is part of a hook-up between the hump conductor, the humpmaster and the three control towers. As the cars go over the hump those marked with whitewash are routed to the rip-track layout adjacent to the classification yard on the south side. The car numbers are transmitted by the intercommunication system to the inspector in the pit who then makes a complete report to the rip track by telephone.

### *Detectors for Dragging Parts*

In advance of the inspection pit a number of dragging-equipment detectors are provided on the lead to the hump and the tracks that converge into this lead. Some of the detectors are of the "high" type and when dragging equipment strikes one of these an intermittent signal bell and light in the pit are actuated as a warning to the inspector to watch for the defective parts. When such parts are hanging low enough to strike one of the "low" detectors the bell and light are made to function continuously, this being a signal for the inspector to get out of the pit.

### *Oil Injection Station*

On the upgrade side of the inspection pit is a station where oil is injected into the journal boxes of the cars as they pass on their way to the hump. On each side of the track at this point is a shallow concrete pit and over it is a shelter which is open on the track side. The oilers, using squeeze-type nozzles to control the flow of oil, are stationed in these pits. As a foot-warming measure for these men during the winter, radiant heating coils are embedded in the floors of the pits.

The car-repair facilities include a service building and four repair tracks. The latter are built with 7-ft. ties, and are separated by concrete platforms or runways which are so designed that the edges can be used as jacking blocks. These facilities are used for making light repairs to loaded cars; if major repairs are required the equipment is sent to the existing car-repair facilities in the engine-terminal area.

### *Other New Buildings*

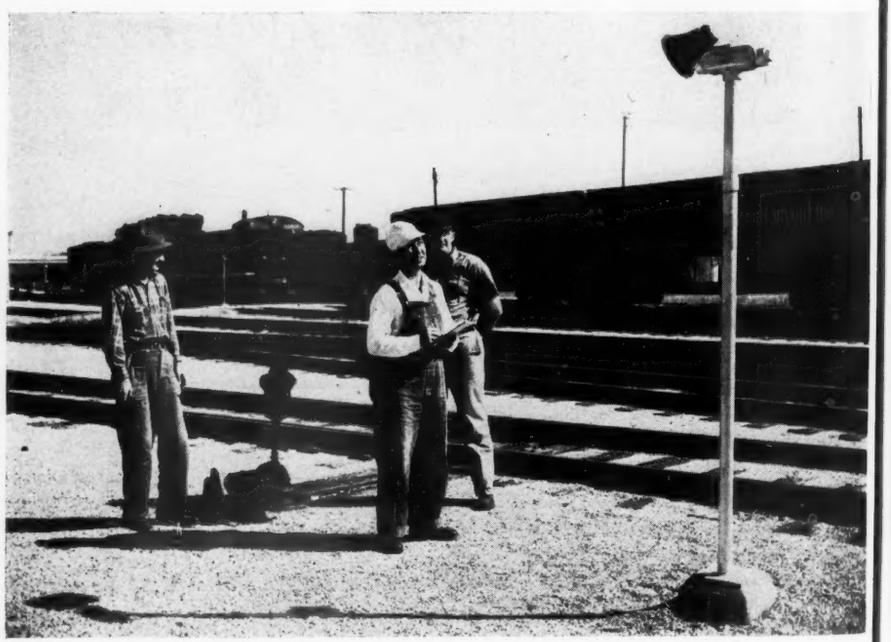
Buildings constructed as part of this project, other than those already mentioned, include an office building for the "bowl" yardmaster, which is located at the west end of the classification yard, and a "west-end" yard office, which is situated near the Key Road viaduct at Turner. Both buildings are of modern brick and concrete construction. The bowl yard office includes a four-story tower in which the office of the yardmaster is located on the fourth floor. This office and several others throughout the yard are equipped with Westinghouse Unitaire air-conditioning units. On the first floor of this

In the yard as revamped extensive use is made of pneumatic tubes. Waybills for incoming westbound trains, dropped off at the east-end office, are sent to the main office in a 5½-in. tube, 4,700 ft. long. Waybills of incoming eastbound trains, delivered by conductors to the west-end yard office, are sent through a 5½-in. tube, 7,200 ft. long, to the bowl yard office, whence they are relayed through a tube 6,500 ft. long to the main office building. Conversely, waybills for departing trains are tubed to the east-end office for eastbound trains and to the bowl or west-end office for westbound trains. There is a total of 18,400 lin. ft. of 5½-in. pneumatic tubing, all of aluminum alloy. In addition, car cards are delivered from the main yard office to the hump conductor through a 3-in. aluminum alloy tube.

Teletype also serves an important function in the operation of the modernized yard. The use of this means of communication begins with the transmission of consists of trains considerably in advance of their arrival. For

(Above) From his quarters on the fourth floor of this building the "bowl" yardmaster has a panoramic view of that portion of the yard under his jurisdiction

(Right) An engine foreman converses with the yardmaster through one of the talk-back speakers spotted strategically throughout the yard



building are an operator's office for telegraph and Teletype, a relay station in the pneumatic tube system (described later), welfare facilities for employees, and a room containing an oil-burning hot-water heater.

The west-end yard office is an attractive single-story building which, in addition to the office of the west-end yardmaster, contains an office for the agent and the teletype and centralized traffic control operators, a locker room for car men, and toilets and showers.

Existing buildings that are continuing to play a vital role in the operation of the modernized yard include a yard office building near the entering end of the westbound receiving yard, which building was remodeled as part of the project, and the main yard office building which is on the south side of the yard about midway of the westbound receiving yard. The Argentine passenger depot, a short distance east of the main yard office building, was not involved in the work.

westbound trains consists are teletyped from Shopton, Iowa, 221 mi. to the east; for eastbound trains they are sent from Emporia, Kan., 118 mi. to the west. Switch lists prepared in the main yard office are sent by teletype to the humpmaster's office and the three control towers. A duplicating printer in the humpmaster's office prepares an extra copy which is sent by pneumatic tube to the hump conductor.

### *Large Public-Address System*

An extensive system of paging and talk-back speakers in the yard permits the various offices to keep in close contact with the personnel out in the yard. This system comprises 112 Jensen talk-back speakers and more than 30 Jensen paging speakers. The speakers in this system are arranged in four groups, one centering in the east-end office, one in the hump tower, one in the

tower of the bowl yard office, and one in the west-end yardmaster's office.

A separate communication system is provided for the use of the mechanical department in exchanging information between the rip-track foremen or a car foreman in the bowl office on the one hand, and carmen working out in the yard on the other. In this system paging speakers are used to summon the men in the yard, after which the necessary exchange of information takes place by telephone. For this purpose a telephone is either mounted directly on the paging speaker standard or is provided nearby. Some of the paging speakers have dual controls to permit their use by both the operating and mechanical departments. The mechanical department system consists of ten paging speakers and five telephones in the departure yards, seven paging speakers and the same number of telephones in the eastbound receiving yard, a corresponding number of paging speakers and telephones in the westbound receiving yard, and four paging speakers and two telephones at the rip track.

Two separate intercommunication systems are provided in the yard. One of these connects the humpmaster, the hump conductor, the three control towers, and the under-track inspection pit. The other provides a hook-up between the east-end yard office, the interlocking tower at the east end of the yard, the humpmaster, the bowl yardmaster, the west-end yard office and the offices of the superintendent, the trainmaster and the general yardmaster in the main yard office. The desk units for the intercommunication systems were furnished by the R. W. Neill Company, which also made the console for the public-address systems.

### *Radio for Yard Locomotives*

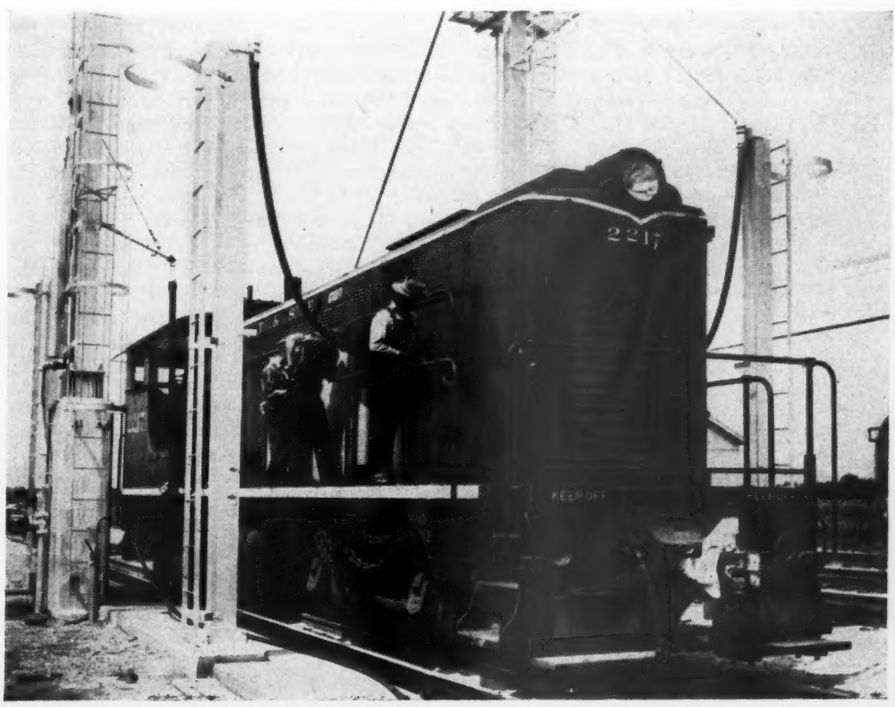
Switching locomotives working in the yard, all Diesel-electrics, are brought into close contact with various yard offices by means of radio. Two frequencies are used, one for communication between the humpmaster and the hump conductor on the one hand and humping locomotives on the other, and the other for communication with all other engines operating in the yard and in transfer service. Nine engines used in the humping area have radios equipped to operate on both frequencies, while the radios in all the other yard locomotives have only the "all-yard" frequency. Radio communication with locomotives engaged in humping cars is supplemented by the usual hump signals. Another use of radio in the yard is in the form of "walkie-talkie" units that are employed by car checkers in the receiving and departure yards to transmit car numbers to the bill clerks.

For use in humping cars two special 2,000-hp. Diesel-electric switchers are used. Humping locomotives of this size are considered necessary because there is a difference of 28 ft. in the elevation of the westbound receiving yard, from which strings of cars are humped, and that of the crest of the hump. The presence of a viaduct carrying Goddard avenue over the westbound receiving yard prevented the tracks from being raised to reduce this difference in elevation.

### *New Machines for Icing Dock*

Formerly two servicing layouts for Diesel switchers and road locomotives were provided, one at the engine terminal and another near the main yard office. The latter facility has been replaced with a new and enlarged servicing plant on the south side of the westbound receiving yard and somewhat toward its west end. An additional servicing installation, provided especially for the use of trimmer engines, is located near the west end of the classfication yard.

As part of this project the icing dock, situated in what is now the eastbound receiving yard, was subjected to important changes, including the addition of new types of equipment designed to enhance the speed and efficiency with which cars are iced. As it existed prior to the recent improvements the icing platform was a high-level structure of sufficient length to accommodate 65



**A servicing platform for trimmer engines is located near the "bowl" yard office**

cars on each side. Reefers that required body icing were moved to another location for this purpose.

The capacity and speed of the dock have now been considerably increased by the addition of two icing machines. One of these, known as a Rico platform icer, operates on a track on that part of the dock (1,530 ft.) that extends west of the Carlisle Road viaduct. This is a self-propelled machine that picks up blocks of ice from the conveyor on the platform, breaks them up into pieces of the desired size, and delivers the chunks through chutes directly into the bunkers of cars on both sides of the platform. That part of the dock east of the viaduct (540 ft.) is now used for storage and for handling "strays."

The second machine, also self-propelled, operates on a standard-gage track on the ground and is designed for both bunker and body icing. The track for this machine extends westerly from the west end of the dock a sufficient distance to provide 97 car spots on each of two tracks from the Carlisle Road viaduct. Ice blocks for this machine are delivered by a conveyor that extends the full length of the icing track.

### *Contractors and Supervisors*

The grading on this project, amounting to about 1,100,000 cu. yd., was performed by Winston Brothers Company and Cook & O'Brien. These companies also did certain force-account work. Some of the buildings were constructed by the Universal Construction Company, and others by Collin's Construction Company, both of Kansas City, Mo. The two highway viaducts were built by C. E. Maxwell & Son; and the electrical work was done by the Super-Electric Construction Company, Chicago, and the Squire Electric Company, Kansas City. Railway company forces did the track work and installed the signals, the retarders and the communications.

The project was carried out under the general supervision of T. A. Blair, chief engineer, system, of the Santa Fe, Chicago, and F. D. Kinnie, chief engineer of the Eastern lines, Topeka, Kan. C. E. Merriman, construction superintendent, had direct supervision over the design and construction of the yard, having been given that assignment in 1943. Monte Bell, division engineer at Argentine, supervised the railroad's extra gangs engaged on track work. The signal design work was done under the general direction of G. K. Thomas, system signal engineer, and the direct supervision of V. O. Smeltzer, assistant system signal engineer, with D. W. Fuller, signal engineer, Eastern lines, in general charge of the installation of the signals and car retarders. This work was supervised directly by A. Loomis, assistant engineer, signal department. J. A. Parkinson, superintendent of communications, system, had general supervision over the planning and design of the communication system, assisted by L. R. Thomas, electronics engineer. E. K. Metzdorf, assistant superintendent of communications, Eastern lines, supervised the installation of communications, assisted on the ground by F. R. Moore, construction engineer, communications.

## New Book . . .

**FLORIDA'S FLAGLER, by Sidney Walter Martin. 280 pages, 8½ in. by 5¼ in. Bound in cloth. Published by University of Georgia Press, Athens, Ga. $4.**

At 53, Henry M. Flagler had some $20 million and a new young wife and his honeymoon trip to Florida was to have amazing consequences for the East Coast of that state, which was then—in 1883—largely a swampy wilderness. The Standard Oil partner fell in love with Florida and, for the next 30 years, found in the development of large areas a fascinating and frequently profitable hobby.

Flagler's only experience with railways up to that time had been his highly successful efforts to secure rebates in shipping his company's oil and he got into the railway business largely through accident. He determined to build a magnificent tourist hotel at St. Augustine and the delays he encountered in shipping materials for the building induced him, on December 31, 1885, to buy his first railway, one of the narrow-gage lines that served St. Augustine. Shortly thereafter he bought the other two narrow-gage lines that entered St. Augustine. His southward march began through the purchase late in 1888, of a logging road that ran from St. Augustine, via Ormond Beach, to Daytona.

For a time, Flagler confined his railway activities to rebuilding his lines to high standards and to the construction of two expensive railway bridges across the broad St. Johns river at Jacksonville and Palatka, thus linking up his railways so that through trains from New York could be operated as far south at Daytona, 110 miles from Jacksonville. So far, he had not built a single mile of new line, but in 1892, he secured a charter to build from Daytona to Miami, through what had been regarded as impenetrable swamps. As the author points out, Flagler realized huge profits on his hotels and real estate developments and little or no profit from his railway interests, but the latter became a hobby, and he developed a passion for watching steel being pushed on into undeveloped territory. The last 66-mile extension to Miami was completed by April, 1896.

Domestic troubles slowed Flagler for a time. By 1904, the 74-year old man had married a third wife, some 40 years his junior, and was on the march again. His $20,000,000 project was to be labeled "Flagler's Folly," but, regardless of its merits, it was a magnificent project, building a 150-mile railway south from Miami and across the keys to Key West. The engineering difficulties were unique in railway history and the line took seven years to build, but when, in January, 1912, the first train rolled into Key West, 82-year old Henry Flagler was one of the spryest and certainly the happiest member of the distinguished company aboard. The old man wasn't through building railways even then. In 1913, when he died, his construction crews were again on the march through the pines and palmettos to reach the fertile muck lands on the east shore of Lake Okeechobee.

The author, professor of history at the University of Georgia, has produced a detailed, accurate and readable book covering the career of a man who was outstanding among the railway *builders* of this country.

## *"Vital Need for Public Awakening"*

The railroad industry today *is* in a critical situation. That critical situation has been brought about by a number of progressive developments which are in the main beyond the control of railroad management.

In the first place, labor and material costs on the railroads have spiralled tremendously since the beginning of World War II. . . . I know that the railroads are not alone in this experience, but these items, together with taxes, have approximately doubled railroad operating expenses since 1939, and they are important factors which must be taken into account in a consideration of the overall railroad situation. On the other hand, railroad freight rates in that time have gone up approximately 57 per cent, which is a figure considerably below the average increase in the prices of commodities of all kinds, and the cost of living index. Nevertheless, railroad rates today are dangerously near the point where further increases will tend to drive business to competing transportation agencies, and railroad management realizes that further relief will have to come from the practice of strict economy in operation, and from a greater volume of traffic.

The railroads cannot, as in most all other industry, quickly adjust their prices to meet rapidly changing conditions. The increased rates granted to date came only after expensive and time-consuming hearings before the Interstate Commerce Commission, and the rates were fixed by the commission and granted many months after their need became apparent. During the lag period the railroads were without needed relief while their cost of doing business was increasing at a rapid pace. The point I wish to stress is the fact that the railroads operate within a maze of antiquated federal and state regulations covering almost every operating procedure, with a controlled rate structure which is intensely rigid. These handicaps make it exceedingly difficult for them to keep abreast of changing conditions, and to promptly and adequately meet the transportation demands of our growing and expanding industry.

Great inroads are being made today in the rail traffic volume because of vigorous activity by competing agencies of transportation, particularly the truck lines, which enjoy a liberal government subsidy in their operations. These agencies of transportation are also almost completely free of regulation in the matter of establishing rates and in other operating methods. I know all of you have read or heard in recent months comment, pro and con, on the subject of truck subsidies, but you cannot make a fair appraisal of the situation without having all the facts before you. . . . The fact that the trucking industry is substantially subsidized is becoming universally recognized by government officials, economists and business leaders, Results of many studies made by federal and state highway commissions show conclusively that the heavy trucks are falling far short of paying their way on the highways of our country.

Here are a few concrete examples: A study in California showed that it cost 22 per cent more to build highways for both passenger and heavy truck traffic, and 55 per cent more to maintain these highways, than for passenger cars and light trucks only. A survey conducted by the highway department of Pennsylvania showed that roads used by heavy trucks cost *16 times more* to maintain than roads used by ordinary traffic. This same study developed that heavy trucks and trailers form 4 per cent of Pennsylvania's total traffic, pay 12 per cent of the motor fees and gasoline taxes, but cause approximately 90 per cent of the highway damage. . . . The truck lines claim that by the payment of taxes they are paying their way on the public-owned highways. A factor here that is overlooked is that whatever taxes the truck industry pays, that is *all they pay* for the use of their rights-of-way, which are the highways. A true comparison must be made with the over-all cost borne by the railroads for providing, maintaining and paying taxes on their rights-of-way. Our railroads have an average value of $80,000 a mile, which was paid for by the railroads. Maintenance costs average $5,000 a mile, and on top of this the railroads pay an average of $1,200 a mile a year in taxes to local and state governments. And ironically, a good portion of the railroads' tax money goes to build and maintain the highways.

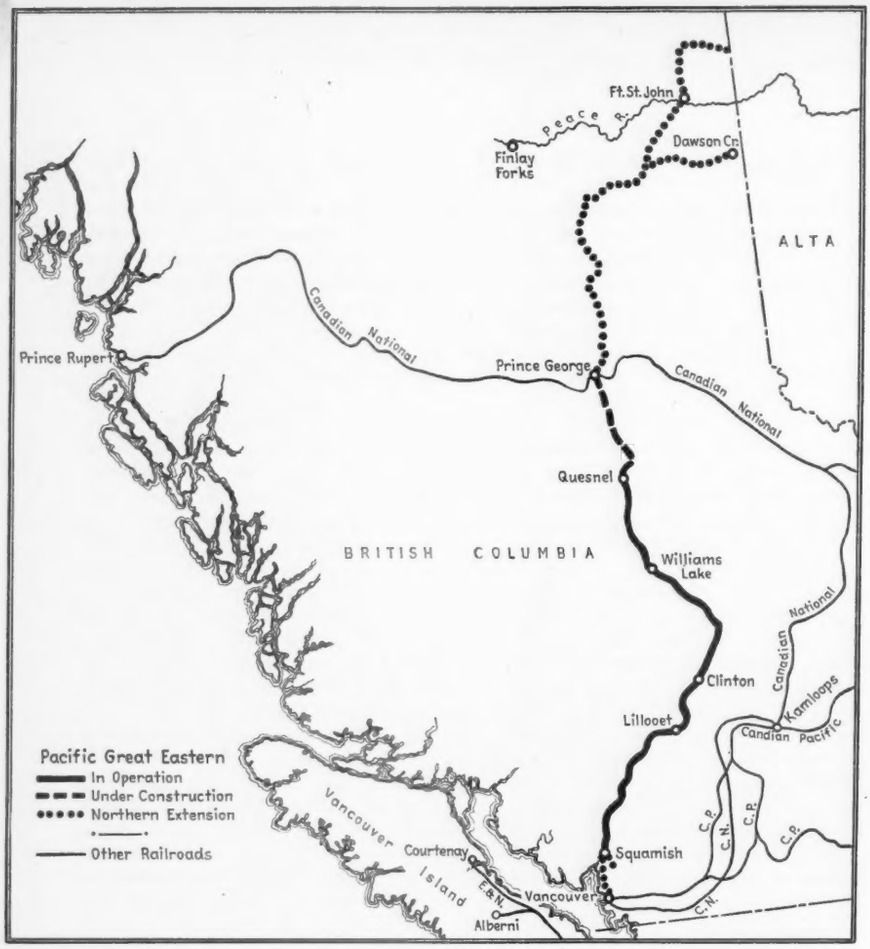
The fact remains that the total taxes paid by the truck industry, which is their sole cost for use of right-of-way, averages about 5 per cent of gross revenue. The maintenance cost of rights-of-way, plus taxes, on the railroads ranges from 18 per cent to 22 per cent of gross revenue, and this does not take into account their original investment in right-of-way. You and I, as individuals, and our companies, pay taxes as a contribution to good government, good schools, and good public properties. Beyond that, we expect no other return. The trucks, airlines and waterways pay taxes in return for which they expect and demand the use of vast, expensive public-owned facilities with which to do business in competition with the railroads. Anyway you look at this picture, the railroads are placed in an unfair disadvantage in their effort to operate their plant as a self-sustaining, free enterprise.

I wonder what your reaction would be if a benevolent government would come along and build a big, modern lumber yard across the street from your place of business, and then permit an operator to occupy this yard for a token fee, with no real estate taxes to pay, to do business in competition with you. At the same time the government would fix your prices and regulate your operations, while the operator across the street was left free to do business as he chooses—and he could undersell you because he had a very low operating expense. I think you would have every right to raise your voice in protest—and yet, gentlemen, that is an apt illustration of the situation the railroads are in today, with fine highways, magnificant airports, and waterways channels built and paid for by the taxpayers and made available at little cost to our competitors.

One thing is certain—if and when the railroads are unable to function as private enterprises, the government will take over their operations. If that happens, the trucking industry, and other forms of transportation, will soon follow. And the cost of all transportation would go up immediately, because government operation would be inefficient, and you and other business men would have to assume the huge tax bill now paid by the railroads—the government pays no taxes. If present policies and straightjacket regulations are continued, the railroads are headed directly for government ownership, which would be a first step toward socialism in this country. Railroad management cannot alone stave off this tragic end, and there is vital need today for a public awakening to the dangers that beset the railroad industry. We must see a greater public appreciation of the value of the railroads to the economic health of the nation, for it is the public, in the last analysis, who must determine if the railroads are to be permitted to function as private and thriving enterprises. From the public must come the relief that is necessary to assure a healthy railroad industry. This relief must come in the form of equitable laws which will place the railroads on an equal footing with competing agencies of transportation. Railroad management, too, must be given prerogatives to exercise judgment in the operation of their properties, now denied to them to a great extent because of strict governmental regulations. There must be a flexibility in the matter of rates and other operating practices, as there is in other industries, so the railroads may quickly make adjustments to meet changing conditions and competitive situations.

I believe every shipper of freight—every business and civic leader—must determine to his own satisfaction whether or not he feels that the railroads, as private, self-sustaining enterprises, are a valuable asset to the economic health and well-being of the nation. If he is convinced of that fact, then he must, for his own good and eventual profit support the industry. By using transportation service that could not be economically justified on a self-sustaining basis, a shipper is not only adding to his own tax burden, but he is withholding the support needed by the railroads to effect economies in operation which would eventually permit them to lower freight charges.

*—From an address by R. J. Morfa, chairman of the Missouri-Kansas-Texas, before the Fort Worth (Texas) Lumbermen's Club on October 20.*




All photos courtesy British Columbia Government Travel Bureau, Victoria, B. C.

**The proposed "northern extension" of the P.G.E. has two possible branches—one to Dawson Creek, and another, more northerly, to the Alberta boundary, beyond which the British Columbia-owned P.G.E. would have no jurisdiction. If the northern spur could be linked up with the railways in Alberta it might be the more profitable route, but for the present the provincial government is said to favor the southerly, all-British Columbia line to the Peace River grain country. Ultimately, both extensions may be built**

***Extensions under way, or planned for the future, will tap vast natural resources — May become part of strategic rail line to Alaska***

The approach of a British Columbia winter has temporarily halted construction activities on what is presently the largest railroad extension job in the Dominion of Canada, and possibly on the North American continent.

It is the 81.5-mi. extension of the Pacific Great Eastern from its 28-year-old "temporary" terminus at Quesnel, B.C., to Prince George. The $7,500,000 job was started during the past summer and the line is expected to be in service by 1951.

The P.G.E., the self-styled "Friendly Railroad," 347 mi. long, has had the reputation of "beginning nowhere and ending nowhere." Originally planned to start at Vancouver and connect at Prince George with the Grand Trunk Pacific, now part of the Canadian National, it has operated instead between Squamish, at the head of Howe sound, some 30 mi. from Vancouver, and Quesnel.

Almost from its beginning, it has been the largely unwanted property of the province of British Columbia, which has looked on it somewhat as a stepchild. That government acquired the railroad in the early days of World War I when the line was less than half built and the contractors whose bonds had been guaranteed by the province had gone bankrupt. Half-heartedly, the province completed construction to Quesnel. But the vital 80 mi. to the northern transcontinental railroad was not completed. Finally, in 1945, the province decided it had to do the job itself and that is just what it started out to do last summer.

## Early History

Actually the P.G.E. was conceived as the Vancouver outlet for the Grand Trunk Pacific. In 1910 the latter surveyed a route following the valley of the Fraser river from Prince George to Lillooet and then to Harrison Lake, but this proved too difficult. A feasible line was required to provide Vancouver connections and to form the nucleus of a north and south transportation system between the Canadian Pacific and Canadian National, running almost parallel within a few miles of each other fairly close to the U. S. border. and the G.T.P., which, instead of turning south after crossing the Rockies in Yellowhead Pass, con-

Mr. Allie, who is publicity director for the Michigan Railroads Association, obtained material for this article while on a recent trip to British Columbia and Alaska.

By R. H. ALLIE

# Pacific Great Eastern Builds Northward

tinued west to the coast, terminating at Prince Rupert. Besides tying these systems together the new railroad would open up the central sections of the province—the historic Cariboo gold country, the Lillooet "dry belt" and other regions that had been by-passed by railroads and still depended upon slow moving freight-wagons for transportation.

In 1912 the P.G.E. Railway Company was incorporated under provincial charter and bond guarantee to construct and operate a railway from Prince George to Vancouver harbor, 470 mi. In 1914 the charter and bond guarantee were extended to a line into the Peace River country.

At Prince George terminal and traffic agreements were made whereby all freight destined for Vancouver originating on the Grand Trunk was to be routed over the P.G.E.; reciprocally, all freight originating on the P.G.E. destined for eastern points was to be routed by the G.T.P.

Up to 1916 the P.G.E. graded 13 mi. from North Vancouver and 428 mi. from Squamish to Prince George. Early in 1915 the 13 mi. to Whyte Cliff were opened to traffic. It was about then the contractors went bankrupt and the provincial government found itself with an "orphan" on its hands. War shortages and heavy construction costs slowed down operations and it was not until 1921 that the 347 mi. to Quesnel were opened for traffic. Further construction was completely halted until this summer.

### *Construction Under Way*

The extension from Quesnel to Prince George was begun last June 27. The line had been graded as far back as 1920 and then was left to deteriorate. In building the new extension 44 mi. were revised so that only 38 mi. of the old grade are being used. The first contract let was for 14 mi. north of Quesnel for grading and clearing, this to be finished by October 31. A further 16 mi. was let, on which only placing of culverts and clearing was to be done by winter. These contracts were awarded to Campbell-Bennett, Ltd.—a Vancouver firm. A third contract was let in mid-September for 17 mi. south of Prince George, a large portion of it on the old line. Contracts to close the gap are expected to be let early in 1950. Per mile construction costs have been placed at $15,000. Much of the line extends through treacherous terrain where the builders have tried to avoid places with unstable subgrade. The extension includes two large bridges,

A Pacific Great Eastern gas car in service between Shalalth and Lillooet

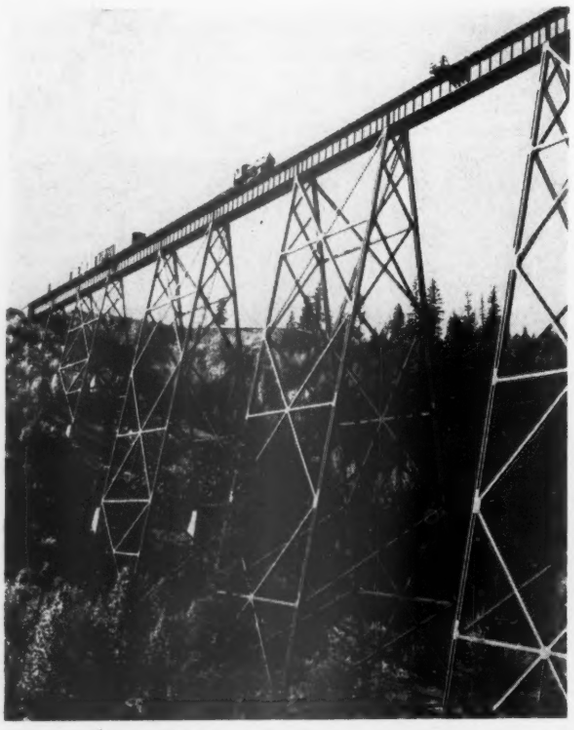
one across the Cottonwood river, 920 ft. long and 220 ft. above mean water, and one across Ahbau creek, 800 ft. long and 155 ft. above mean water.

The 81.5-mi. stretch under construction is only the first step in a program intended to extend the P.G.E. another 270 mi. to Dawson Creek on the east side of the Rocky Mountains and in the heart of the prosperous Peace River country. In 1950, survey parties will commence work on the grade that will follow an already settled route running east, then north, from Prince George to lofty Summit Lake; then eastward, climbing through the Pine River valley and directly to Dawson Creek. The cost of this extension has been set at $18,000,000, on the basis of approximately $70,000 per mile.

### *Traffic, Revenues, and Equipment*

Throughout its existence the P.G.E. has operated from Squamish with the aid of its own tug and barge for transportation of freight to and from Vancouver, and a passenger steamer operated by the Union Steamship Company, 51 per cent of the stock of which is owned by the Canadian Pacific, and which serves coastal waters, canneries, logging camps, etc. The steamer makes a daily round-trip between Squamish and Vancouver.

In 1948, according to the Preliminary Report on Statistics of Steam Railways in Canada, the P.G.E. hauled 228,660 tons of revenue freight a total of 45,439,912 ton-miles, and carried 61,615 revenue passengers a total distance of 4,424,521 passenger-miles. Its revenue freight-train mileage was 167,953, and its revenue passenger-train mileage 117,800. Its total operating revenues were $1,838,090, and its total operating expenses $2,211,581, leaving a deficit in net operating revenues of $373,491. Due to interest payments of nearly $4.5 million, however, its net corporate deficit, after interest, equipment rents and all other non-operating income and expenses, was $4,900,189.



Deep Creek bridge on the Pacific Great Eastern

Passenger service is tri-weekly, starting at 2:50 p.m. from Squamish Monday, Wednesday and Friday, and arriving at Quesnel at 10:40 a.m. the next day. The return trip leaves Quesnel at 7:45 p.m., with arrival at Squamish at 3:10 p.m. the succeeding day. Equipment consists of first-class coaches, dining, parlor and standard sleeping cars and observation cars used from June through September. Passenger equipment is on the aged side. Greater effort is being made to put freight equipment into first class condition by making replacements with new freight cars.

Motive power consists of four Diesels, a switching Diesel and 12 steam locomotives. Present plans contemplate addition of six new Diesels to do away entirely with steam power.

As part of the extension plan the existing line is under rehabilitation. The program involves tie renewals, concrete retaining walls, diversions of line to eliminate dangerous wooden trestles, etc., expected to cost about $2,500,000 and to take two years.

The route of the P.G.E. leads through mountains and heavily forested lake country, and the scenery is said to surpass that along any transcontinental railroad through the Rocky Mountains. Rivers and cataracts line the route. Quiet lakes mirror the rugged mountains. Lillooet offers the contrast of orchard and farmland. And the Cariboo cattle lands present an entirely different and picturesque panorama. Around and beyond Quesnel lies part of the province's great green country. The area is a paradise for tourists, who have used the P.G.E. in increasing numbers since the war, and for sportsmen—game and fish abound all along the railroad's route.

### *Will Open Up New Territory*

The present extension to Prince George and that proposed to Dawson Creek have revived the 30-year-old argument about the P.G.E. The provincial government and its advisers, it is pointed out, seem assured its continuance and extension are justified. The opposition points out that P.G.E. has been a "white elephant" over the years—a "white elephant with neither trunk nor tail," and has never paid its way. They point out that the P.G.E. has cost the government $40 million in construction and maintenance and that, they feel, is enough.

Behind the government's decision to extend the line are a number of factors. The country has undergone enormous economic changes. Population has increased to more than a million. The province, now one of the wealthiest in Canada, can afford railroad extensions. For years the province has promised farmers and others in the remote interior better transportation. This promise it now plans to fulfill. In addition the interior has progressed considerably. Population has increased sharply; much arable land has been occupied, a process greatly accelerated in the last three years since the government has taken a hand, with

modern machinery, and is helping settlers in the expensive job of clearing. High quality crops are being raised in increasing tonnages; grazing lands are turning out growing quantities of animal products (though livestock in some instances is being driven 100 mi. to transportation). Population increases would have been greater, the taking up of land would have been more rapid, extension defenders contend, had there been better transportation in the area. The present extension alone is expected to bring 100,000 additional acres into profitable agricultural production. Recently the government has located a dozen ready-made sites for hydroelectric development and already has in hand one at Quesnel.

It is also pointed out that mining and prospecting operations have increased in the area since the war, despite the difficulty of transportation, and that the advent of the latter and power to operate mines will stimulate the industry and provide additional tonnages for the P.G.E. Another factor pointed out by extensionists is the tremendous potential of traffic the operation will open up in the vast timber area in the so-called Great Bend of the Fraser river, eastward from Prince George. There surveys disclose some of the richest forest lands on the continent, said to contain 45 billion board feet. Also, there are huge stands of timber north and west of Prince George and to the north and west of Quesnel, not yet inventoried. Much of this timberland is spruce and balsam, which provides the alpha cellulose for nylons and related products. And the government, recognizing that transporting pulp logs from the hinterland to tidewater might prove impractical, is providing the mentioned hydro plant at Quesnel to feed a pulp mill there, output of which would be a traffic potential for the P.G.E.

A P.G.E. railway bridge near Lillooet

### *Potential Coal Lode*

But the long-term view of the government toward the P.G.E. is the 270-mi. extension beyond Prince George to Dawson Creek in the Peace River country east of the Rockies, That vast grain area could supply the P.G.E. with great tonnages of wheat and other grain, because it would considerably shorten its rail route to tidewater, an advantage for the shippers, and force existing rail lines to compete for the traffic.

But beyond all the grain traffic envisioned from around Dawson Creek and eastward is the existence, if scientists are to be believed, of 6 trillion tons of coal in interior British Columbia, of a quality said to be unsurpassed in North America. The coal field has been outlined as paralleling the Rockies and lying on their eastern slopes, and additional deposits are being exposed. Already, more than 200,000,000 tons, it is estimated, are indicated as being tributary to the P.G.E.'s present extension. Finally, there is the promise of important oil deposits.

Thus the province views the P.G.E. not solely as a railroad needing aid, but as an asset in developing a country—bringing in new residents, expanding agriculture, mining, oil and coal, timber products and hydro industries, thereby creating much additional traffic for the railroad itself. Expenditures on behalf of the railroad are, thus, to assist development of the province itself.

Now that the province has taken the P.G.E. and its future seriously, it is doing a thorough job of fortifying that future. In addition to the present extension, the government has begun surveys for a highway between Vancouver and Squamish to replace the boat service for passengers and express. Cost of building the road will be met through the department of public works. As a result, P.G.E. freight from the north can then be handled by truck between Squamish and Vancouver instead of by the cumbersome barge and steamer transfer, and passengers would have this alternative and speedier connection.

Another government activity tending to help the P.G.E. is the development of a deep sea port at Squam-

(*Continued on page* 57)

# DO YOU WANT

## Private, Public, or Ha

[The following article is condensed from a challenging address at the annual dinner of the Associated Traffic Clubs in Houston, Tex., on October 25, where the audience of 1,200 included truck and barge operators and shippers with large private transport fleets as well as railroad men and their customers.]

I have never encountered an opinion that the railroads are unnecessary. On the other hand, railroads are considered an indispensable part of our economy, and it is in the light of that conviction that I think you should examine the numerous facets in the question, "What do you want, and how do you expect to get it?" as it applies to the railroads. Three supplemental questions arise immediately:

(1) Do you want privately owned railroads, paying their way entirely from revenues produced by charges for services rendered, and maintaining a plant which, in the language of the National Transportation Policy, is adequate to meet the needs of the commerce of the United States, of the postal service, and of the national defense? That is what we have today.

(2) If that isn't what you want, do you favor the socialization of the railroad industry?

(3) Do you want a half free-half slave railroad industry which is partially supported by the taxpayers and only partially supported by charges for services rendered? There is much of this in connection with other forms of transportation.

Implicit in this plan of operation is another question: How much should be paid by the taxpayer, and how much by those who travel or ship? Still another question is, How long can such a system exist, and isn't this system merely a "twilight zone" between private property and state property?

Before making up your minds about these alternatives, which, as I see it, are the principal ones we need consider, I suggest you determine how the extension of the plan you favor for the railroads would affect your own business, your own individual life, and how it would affect the application of the economic concept which you think holds forth the greatest promise for the individual and economic freedom you want for yourself, your family, and your associates.

### *Results Count*

My own answer to the questions I have propounded is that I believe in the privately owned railroads of the United States and believe that they should continue to finance their operations from revenues produced by charges for services rendered. This system produces results. For example, the Santa Fe, one of the railroads made possible by the system, is in the best physical condition in its history. It is not being boastful to say that we are giving the best service we ever rendered. We should be able to continue that better service, and to improve it. I have referred to Santa Fe because I am more familiar with it, but I think that what I have just said applies also to the other railroads.

The private enterprise system is in danger due to the activities of two groups. First, those who are opposed on ideological grounds to our system of private ownership and management of property, and, secondly, those who, while professing belief in the system, seemingly fail to see danger in accepting financial assistance from government. Financial help from government inevitably means the introduction of governmental direction of business policy, and that in this day is the forerunner of state control, domination, management and ownership.

The collectivist knows all this and believes in these methods of accomplishing his objective. The collectivist knows that his ambitions are furthered when American capitalism, or American private management of property can be damaged and discredited. And don't kid yourselves—*the collectivist has been making more yardage than the home team.* This is true despite the fact that the leaders of the railway labor organizations have declared themselves against socialized railroads, and I believe they are. Top flight officials of government say they believe in private ownership and management of property, and I believe they do. I think, however, that on the second and third levels of government officers there are those who are opposed to private ownership.

It is difficult to get facts and statistics which may be used in making comparisons between the results of the American system of privately owned and privately managed railroads and those of the socialized countries. I have, however, been able to secure official figures which enable us to make some comparisons between the railroads of Japan and England, and the railroad I represent, namely, the Santa Fe. I chose to make the comparisons between the Santa Fe and the railroads of Japan and England because the extent of the physical plants are sufficiently similar to make the comparisons somewhat interesting. Here are some of the high spots of comparisons for the year 1948:

| | Santa Fe System | Japanese Government Railways | British Railways |
|---|---|---|---|
| Road miles of line | 13,081 | 12,273 | 19,631 |
| Revenue ton-miles (Millions) | 32,994 | 13,059 | 21,457 |
| Revenue passenger-miles (Billions) | 2.3 | 54.7 | 21.3 |
| Total traffic units (Billions) | 37.5 | 122.5 | 64.0 |
| Total railway employees | 66,169 | 589,587 | 648,740 |

Japan's railway traffic, measured in the conventional traffic units (freight ton-miles plus two times passenger-miles), was less than four times that of the Santa Fe

system. Measured in the same manner, the traffic of the British Railways was less than two times that of the Santa Fe. The number of railway employees in the service of each of those nationalized railway systems is nearly ten times the number in service of the Santa Fe. The net income results of the Japanese Government Railways for the fiscal year ended in 1948 are not reported. However, the reporting of operating revenues amounting to 27 billion yen and operating expenses of more than 40 billion yen shows that their operating ratio was almost 150 per cent.

The foregoing statistics of British Railways cover only the line-haul railroads (excluding the London Transport System of railroads and buses, highway operations, inland waterways, and government-owned hotels). However, Britain's nationalized transportation system ended its first year of operation with a deficit of almost $19 million, and their report said "The trend of traffic receipts and expenditures in 1949 holds out no hope that the immediate future is likely to show better results." The British Transport Commission, in its first annual report of 424 pages, describes the position as "unsatisfactory."

[In this connection, Mr. Gurley quoted at length from a *Railway Age* editorial titled "Little Good and a Lot of Bad in Socialization of British Railways," which appeared in the August 27 issue.—EDITOR.]

### *If Railroads, Why Not Everything?*

Not only is there the comparison of the important matter of efficiency, touched upon all too briefly in my remarks, but there is malignant growth. If railroads are to be socialized, why shouldn't we expect other transportation media to be included in the program, as highway common carriers were socialized along with the railroads in England? Then with the government owning all transportation media, doesn't control of the supply of equipment, rail, fuel and tools, seem logical to round out a complete picture? It makes the ideal blueprint for the bureaucrat. In other words, where do we stop in the march towards state ownership and operation—or *do* we stop? And how about this? Do you think the spark of imagination, which is so important, will be kindled or will it be snuffed out by these processes?

Now let us turn to a brief examination of the "twilight zone," or half-and-half transportation agencies, supported in part by charges for services rendered, and in part by tax monies.

# or Half-and-Half Railroads?

By **FRED G. GURLEY**
President
Atchison, Topeka & Santa Fe

I shall first discuss the highway truck, and there are many types of highway trucks. There is one class which is known as the railroads are known, namely, a common carrier; but the phrase common carrier as used in connection with a trucker is by no manner of means as broad an expression as it is when used in connection with the railroads. Many trucking companies with authority from the Interstate Commerce Commission to operate as common motor carriers, and who hold themselves out to be "common carriers," are not common carriers at all in the way we understand that term. I observed an analysis of one of the larger common carrier truckers made some time since by one of the financial houses. It said that this line "concentrates on long-haul traffic, its average haul being in excess of that of the average railroad or truck line, materially longer than that of the average freight forwarder, and compares with that of air freight lines."

Please consider the implications of that. I assure you it has its advantages. This is pretty clearly shown by the application of Hancock Truck Lines, Inc.* Hancock is pressing an application to the commission for authority to operate between Evansville, Ind., and Los Angeles, and between Evansville and New Orleans. A railroad operating over those routes would be obliged to furnish service to each and every village and hamlet all along the route, but Hancock seeks authority to serve only four cities on the western route—namely, Little Rock, Ark., Clovis, N. M., and Tucson and Phoenix, Ariz., in addition to Los Angeles.

Hancock would assume no obligation to furnish common carrier service to the hundreds of intermediate points on the two routes. I am told that a very great number of "common carriers" truck certificates grant authority of that character. We also find other "motor common carriers" of specified commodities. One will haul only packing house products, another only petroleum products, another only canned goods, and so on. Generally speaking, the principal highways—those in our primary road system—were built to standards which it was hoped would be sufficient to accommodate axle loads up to 18,000 lb. Many were built to standards known to be sufficient only for a lower load limit. Highways designed for 18,000 lb. have been declared adequate for the purposes of the military forces, and they should be adequate to accommodate all reasonable commercial uses. The Bureau of Public Roads, in a report just published by the Government Printing Office, after reviewing the experience of the past, stated its conclusions in part as follows:

"These lessons of experience have brought highway officials almost unanimously to the conviction that the axle load limit of 18,000 lb. presently fixed by law in 34 states should not be exceeded but rather should be more rigidly enforced as a prudent measure of existing road preservation."

We should keep in mind that the largest gasoline taxpayer is the owner of the private automobile. Then comes the group of other vehicles with acceptable weights. And then comes the heavy-weight trucks—the ones which may be identified as the intercity com-

*MC 25567-Sub. 22.

mercial truckers, and these are the ones which thoughtful people are convinced are doing violence to the highways.

This terrific destruction of highways in recent years under the impact of heavy truck traffic has created a doubt whether the 18,000-lb. axle limit may not be too liberal. Certainly the 18,000-lb. limit should not be exceeded. Nevertheless there are many overloads, and when I say that I mean that there are *many* overloads. These people who overload the highways and the bridge structures do more than commit a technical violation of the laws with respect to axle limitations. Each year they destroy in this country highways that have cost the taxpayers—principally the owners of private automobiles—hundreds and hundreds of millions of dollars to construct and maintain. By these practices they appropriate to themselves an extra use of the highways for which they make no pretense of paying. In so doing they cheat the government and obtain an unfair competitive advantage not only over the railroads, but over law-abiding truckers as well.

### *The Truckers Are Annoyed*

Some comments about this general subject seem to have excited the attention of our friends, the American Trucking Associations. I observe that a few weeks ago they ran quite an advertisement. There were some carefully prepared statements in this ad directed to the creation of an impression that, after all, the weight on axle really doesn't mean much. It is not unfair to say that there was a deliberate effort to play down the effect of axle loads and the impact upon the highways produced by high axle loads moving at relatively fast speeds.

Now, if there is anything which a lifetime of experience in the railroad business has taught me, it is that there is a very definite relation between the roadbed and the axle load. We know that certain locomotives should not be permitted on certain bridges and on certain lines of railroad. We don't let them go there because we want to preserve the roadway and the bridges. We know that a corresponding care should be taken to protect the highways from excessively heavy loads. So we are not at all deceived by these attempts to camouflage the issue.

If you concur in the preference I expressed earlier for our railroad system, we think there are two things which you should do. First you should insist that the load limitations for trucks be respected and that law violators be treated as law violators should be treated. Secondly, that there be a re-examination of the charges paid by commercial truckers for the use of the highways and that they pay what a logical and economic appraisal suggests that they pay.

With the high unit cost of the American railroad system, paying its own way as it does out of revenues produced by charges for services rendered, illegal operations, typified by illegal and improper use of the highways, should not be permitted on the part of their competitors. Such practices are part and parcel of the twilight zone system, one that lies between the business which completely finances all of its operations out of charges for services rendered and the one partially dependent on the monies of the taxpayers. I say again that this twilight zone system is making an unfortunate contribution to the damage of the system I think we should all support; namely, the one that pays all of its bills, provides and maintains its places of business, and buys all of its equipment out of revenues derived from charges assessed for services rendered.

This system of transportation which pays its own way from charges assessed for services rendered is subject to damage also due to the wasteful pursuit of so-called cheap transportation which our government has followed with reference to inland water transportation. Here we find needless additions to the tax bill and to increases in the real and actual cost of transportation for most shippers—especially small shippers.

The Mississippi River transportation system for navigation has already cost the taxpayer $1¼ billion, a great part of which has been paid out in the last 27 years. Apparently these huge sums have been spent because of three allegations which have never been proved, and I do not think they have even been closely examined. These three claims are: (1) that river transportation inherently is cheap; (2) that such cheap transportation is good for the country, and especially for small business and for farmers; and (3) that river transportation will be needed in case of national emergency to relieve the railroads of the burdens which they could not carry. The facts show that all of these are incorrect—or at least have never been realized.

Much of the transportation on the Mississippi River system is so performed that it may not show up as a transportation charge. This is so because, contrary to one of the premises that water transportation is good for the farmer and the small businessman, 75 percent of its traffic moves in vessels owned by a few shippers with such a large volume of traffic that they provide their own vessels in which to move it. Certainly this is not transportation for "small business and farmers." Nor does it affect the transportation which is incident to the daily life of the small community. The water carriers have found that package traffic in small lots is not profitable, so they simply don't accept it.

Now what about the idea that river transportation would be needed to carry the tonnage which during war the railroads could not carry? During the days of World War II we find that in December, 1942, a top-flight official of the United States government, in a public address, called attention to the fact that traffic which ordinarily moved on the inland waterways was diverted to the railroads. And in 1943, the same statement was made by Chester C. Thompson, then in charge of the Federal Barge Lines.

And now what about commercial air lines? Commercial air lines get the free use of, and are the principal users of, the beacons, radio beams, special weather services, radio and radar control towers at airports, and other special facilites for air navigation—all of which are provided, maintained and operated by the taxpayers. Such facilities are comparable to the signal and communication systems and traffic control of the railroads. Examination of House Report No. 1612, 80th Congress, shows that, as of 1946, the total cost per year of maintaining and operating federal aids to air navigation, such as special weather services, beacons, radio communication, and radio and radar control towers at airports, was $40 million. Nothing suggests it is lower

now. They get the use of publicly provided airports at charges which, on the average, don't even begin to meet the cost to the public of providing facilities used. Air lines get more mail pay for carrying 5.3 per cent of the first class, intercity mail than the railroads get for hauling the other 94.7 per cent of this mail. In the fiscal year 1948, the railroads carried 94.7 percent of the first class non-local mail, for which they were paid $26,000,000. On this first-class mail carried by rail, Post Office Department revenues exceeded expenses by $103,000,000. In the same year, the domestic air lines flew 5.3 per cent of the intercity first class mail, for which they were paid by the Post Office Department $41,000,000. The expenses to the Post Office Department of handling domestic air mail exceeded the revenues received from it by $27,000,000.

We hear, of course, that the attitude toward commercial air carriers of people, freight, and mail is influenced because of the thought that the air lines have made an important contribution to national defense. Now there is no question but that the military air force is important and essential in the national defense. So are guns and other weapons. But I think it is quite fair to say that commercial air lines do not occupy any particularly important role in our military defense activities. By reason of these aids to commercial transportation, it's only natural that they are thus in position to establish rates for the transportation of passengers and selected freight traffic which are lower than represented by the cost, and therefore at rates which could not be established if it were not for the aids from the taxpayers. The taxpayers include the self-supporting railroads.

### *Parcel Post vs. Express*

A moment ago I mentioned mail pay, and while on that subject I should say that our government has been expanding its activities in another field which does damage to the self-supporting railroads by calling upon the taxpayer to make good certain losses. I refer now to the fact that the government's Post Office Department operates a parcel post system at rates much below cost. This service is presenting the railroads and their wholly-owned Railway Express Agency with an almost impossible situation. For years there has been an express service offered by the railroads at rates commensurate with the cost and the value of the service for transportation of packages at passenger train speeds. I think there is grave question as to what may happen to that branch of railroad service in the light of the increasing competitive service largely furnished at taxpayer expense.

In closing, I would like to emphasize the preponderating reliance that this country placed on its privately owned railroads during World War II. In the light of that experience, and in the light of the significance of that experience, do you want to do anything in time of peace that would destroy or even seriously impair the vigor and the strength of this railroad network?

You may answer that you don't want to bring about any such disastrous consequence, but that, after all, the railroads must stand on their own feet and not expect any favors in the competitive race. I hope that may be your answer; I can assure you that the privately owned railroads are not asking for any such favors. They don't need any such favors to survive in full vigor, but they do need equality of treatment and equality of regulation. They ask for an end to the injury that is being done to them by subsidies to competing forms of transportation which are much less essential to the national economy either in time of peace or war. They ask that each form of transportation bear the true economic cost of providing the service it sells to the public.

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## PACIFIC GREAT EASTERN

(*Continued from page* 53)

ish, together with facilities for lumber assembly and a finishing mill for rough cut forest products coming from 500 large and small timber operations around Quesnel and, when the railroad taps them, in and around Prince George.

The important Prince George extension and the long-range—and more important—Dawson Creek developments are matters of moment but friends of the P.G.E. think something of greater significance to it and to both Canada and the United States will shortly be given earnest thought. That is the building of a railroad into Alaska. Such a railroad would inevitably be more or less an extension of the P.G.E. The United States, since the early days of World War II, has had a keen interest in such a railroad.

In 1942, Frederick Delano, uncle of President Roosevelt, made a survey to determine the best possible route for one. That chosen followed the so-called Rocky Mountain trench west of the Rockies, because of the consistently low grades. The idea, as a war project, was passed over when the Japanese lost the initiative in the Pacific. However, it has been revived by the renewed strategic importance of Alaska, separated from Siberia only by the narrow Bering Strait and 700 mi. remote from the continent's railway systems.

The last session of Congress, in fact, passed, and President Truman has recently signed, a bill authorizing him to enter an agreement with Canada for a "location survey" for a railroad from Prince George to Fairbanks, Alaska. (See *Railway Age* of October 29, page 51.) The United States, which would probably play a large part in financing such a line, might logically favor this British Columbia route, including the P.G.E., because it would mean that much of the potential traffic could be carried through Seattle and Vancouver, whereas the alternative route through Alberta would mean fewer ton-miles on railroads in the United States.

"I have no doubt," a P.G.E. officer has said, "that the provincial government would welcome the idea of the United States building the railroad extension north to Alaska."

Thus, the P.G.E., which, for a quarter-century, "started nowhere and ended nowhere" may find itself part of a strategic railroad route from the United States through Canada into Alaska—possessed not merely of local, but of international, importance.

(*For further details on the P.G.E. extension, see the News section, pages* 71 *and* 74.)

# GENERAL NEWS

## Clyde Reed Dies At Kansas Home

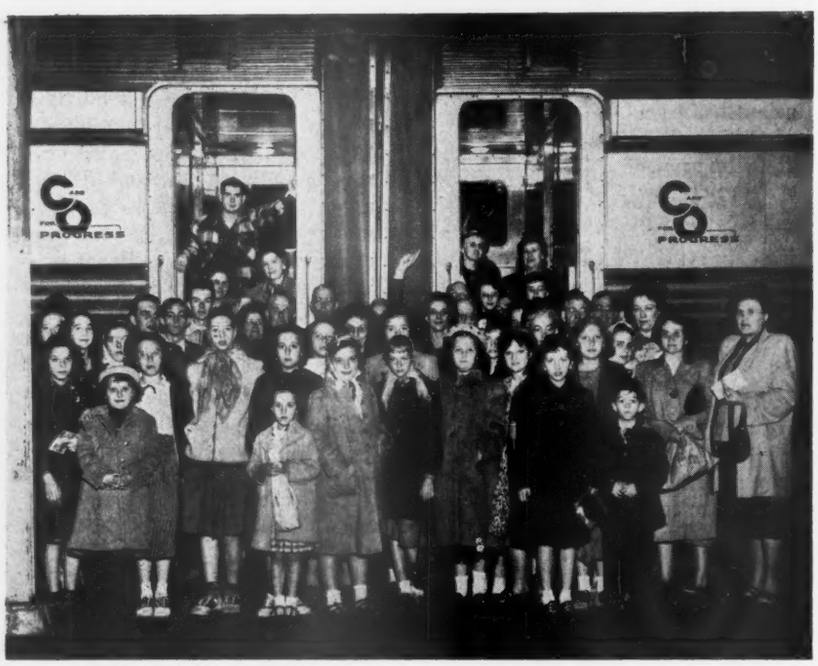
### Member of interstate commerce committee since 1939

Senator Clyde M. Reed, Republican of Kansas, who was recognized as the senator best informed on railroad and transportation problems generally, died November 8 in a fall downstairs at his home in Parsons, Kans. A member of the interstate commerce committee since he came to the Senate in 1939, Mr. Reed was prominently identified with important transportation legislation of the past decade, although he was a minority member of the committee during all but two years of that period.

He was one of the principal architects of the Transportation Act of 1940, and co-sponsor with Representative Bulwinkle, Democrat of North Carolina, of the Reed-Bulwinkle Act (now section 5a of the Interstate Commerce Act) under which carriers are accorded immunity from the anti-trust laws in connection with joint agreements if such agreements are approved by the Interstate Commerce Commission, and if they relate to rates or rentals for equipment or facilities. Before coming to the Senate, Mr. Reed had served as governor of Kansas and as chairman of that state's Public Utilities Commission. Also, he was a practitioner before the I.C.C. and state commissions.

In the latter role, he represented principally shippers of agricultural commodities; and he was the first general chairman of the Trans-Missouri-Kansas Shippers' Advisory Board, serving in the position for some 15 years after the board was organized in 1923. As a senator he was also often a shippers' advocate. He sponsored and participated actively in various investigations of freight-car shortages, and he worked with Colonel J. Monroe Johnson, director of the former Office of Defense Transportation, in setting up arrangements under which steel was voluntarily allocated to freight-car building during the period of steel shortage after World War II. Also, Senator Reed had been sponsor of proposed legislation to give the I.C.C. authority to require the pooling of railroad revenues derived from general freight-rate increases.

At the time of his death, the senator was in his 79th year. He was born in Champaign County, Ill., October 19, 1871. His political career was preceded by a career in the Railway Mail Service, which he entered in 1889 and rose by 1908 to the position of superintendent of the Post Office Department's Railway Adjustment Division. He left this government position in 1910 to become publisher of the Parsons (Kans.) Sun, an association which he thereafter retained, being editor as well as publisher of the paper at the time of his death. His service as chairman of the Kansas Public Utilities Commission was during the 1921-1924 period, and his governorship of that state was for a 1929-1931 term. He was serving his second term in the Senate, having been reelected in 1944 for a term ending January 3, 1951.



**VILLAGE SAYS "THANK YOU" TO C. & O. FOR NEW STREAMLINER.—In appreciation to the Chesapeake & Ohio for giving the community its first streamlined train service, the village of Milford, Mich. (population 2,000 and a flag stop between Detroit, Mich., and Flint), celebrated "Milford Appreciation Day" on November 2. As noted in the *Railway Age* of October 29, page 58, the C. & O. inaugurated, on October 31, a new Diesel-powered, all-stainless-steel streamlined train between Saginaw, Mich., Flint, Milford and Detroit. Here shown are 25 Girl Scouts, one boy, and 30 adults who boarded the train on November 2 for the morning run from Milford to Detroit, spent the day in the latter city, and returned home on the streamliner that evening**

### See Auto-Rate Adjustment Prejudicial to Factory Areas

Examiners Paul O. Carter and Henry C. Lawton have recommended in a proposed report that the Interstate Commerce Commission require the railroads to adjust rates on new automobiles so as to narrow the spread between the basis applicable for shipments from manufacturing plants in Detroit, Mich., South Bend, Ind., Toledo, Ohio, and Kenosha, Mich., and that applicable for shipments from the assembly plants of the General Motors Corporation and the Ford Motor Car Company. The proposed report was issued in the No. 29820 proceeding which involves a complaint filed by six automobile manufactures—Chrysler Corporation, Hudson Motor Car Company, Nash-Kelvinator Corporation, Packard Motor Company, Studebaker Corporation, and Willys-Overland Motors, Inc.

With some exceptions the present rates on new automobiles from the aforementioned points, at which manufacturing plants of these complainants are located, are on a basis of 85 per cent of first class, whereas the bases applicable from General Motors and Ford assembly plants range down to 26 per cent of first class. The examiners' recommended finding is that the rates from complainants' manufacturing plants to destinations in the United States, except to mountain-Pacific states, are

and for the future will be unduly prejudicial to the extent that they exceed, "by more than the difference between 85 and 60 per cent" of the first class rates, the level of rates from the assembly plants of General Motors and Ford.

This recommended finding reflects the examiners' conclusion that the evidence in the case justifies maintenance of a lower level of rates from the assembly plants than from the manufacturing points. "The evidence respecting the severity of competition from the assembly points as compared with that from the manufacturing points is not as satisfactory as it might be, but it does indicate that for distances up to about 400 mi., the competition is more severe from the assembly points," Messrs. Carter and Lawton said. At the same time, they found "inescapable" a conclusion that "the differences between the levels of the rates from the assembly and manufacturing points are too great, and should be reduced."

Meanwhile, they would have the commission find that the complainant's allegation that present rates from the manufacturing points are unreasonable had not been sustained. In that connection, they pointed out that the 85-per-cent scale was prescribed by the commission as a maximum reasonable basis only four years ago in No. 28190, *New Automobiles in Interstate Commerce*. It became effective January 24, 1946. "The evidence introduced in this proceeding in support of the allegation of unreasonableness," the proposed report said, "is essentially the same as that considered in docket No. 28190, the only difference being that the differences between the levels of the rates from the assembly points and those from the manufacturing points have been increased as a result of the general increases . . . No new facts have been shown, conditions respecting the reasonableness of the rates have not undergone a material change, except that the value of automobiles has substantially increased, and there is no proof that the commission acted on a misconception or misapprenhension in docket No. 28190."

As to the issue of "undue prejudice," the examiners said that this was "minor issue" in No. 28190, and the evidence there developed on it "was not nearly so comprehensive as it has been in this proceeding."

## Need for Trained Traffic Men Is Theme of Talk by Goodyear

Declaring that an industrial traffic man before 1900 was "a rare bird" in America, C. J. Goodyear, general traffic manager, Philadelphia & Reading Coal & Iron Co., discussed the role of traffic management in American transportation at a supper meeting on November 8 of the second annual Institute of Industrial Transportation and Traffic Management, American University, in Washington, D. C.

"The regulation of the use of transportation to the needs of commerce and industry can be done only by a specialist—an industrial traffic specialist," Mr. Goodyear said. He also discussed work of the Associated Traffic Clubs of America and of the American Society of Traffic & Transportation, and explained what these groups are doing to prepare trained personnel in traffic for American industry.

The supper meeting, conducted by Prof. L. M. Homberger, director of the institute, and attended by students currently enrolled in the course, included an informal discussion of traffic problems and of rail-truck competition in coal hauling.

Mr. Goodyear estimated that trucks are today handling about seven million tons of anthracite coal a year and, while the movement by truck is presently low, it is only down about 7 per cent as compared to a 25 per cent decrease in the amount handled by rail.

In replying to a question by Interstate Commerce Commissioner Mitchell, also present at the meeting, Mr. Goodyear stated that truck handling of coal, while rates are sometimes higher, still offers "substantial economies" to the ultimate consumer. Mr. Mitchell expressed his own view that rates were an important factor.

Mr. Goodyear said that trucks, especially in hauling to domestic consumers, eliminate the expense of a middle-man. "A vacant lot and a set of scales puts a trucker into the coal business," he said, "and his yard costs in that set-up are but a fraction of rail yard costs." He stated that big trucks generally handle 15 tons, and while he estimated the average truck haul was only 60 miles today he did say that considerable coal is carried into Philadelphia, up to 95 miles from the mines.

It was Mr. Goodyear's closing statement that while factors other than freight rates do affect the switch to trucks, "continued increase in rail rates will drive all business to trucks."

## Supreme Court Won't Hear Appeal from 1948 Strike Ban

Railroad unions involved in the nationwide strike threat of May, 1948—the so-called "holdout ops"—have failed in their undertaking to obtain a determination by the courts of the legality of the injunction which barred their proposed walkout after the government had seized the railroads. The United States Supreme Court on November 7 issued an order denying the unions' petition for a review of the ruling of the United States Court of Appeals for the District of Columbia, which dismissed the injunction because the controversy "has become moot."

The unions are the Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen & Enginemen, and the Switchmen's Union of North America. The Supreme Court's November 7 action marked its second refusal to entertain their appeal. Their first presentation of the case to that court was an unsuccessful undertaking to bypass the Court of Appeals (see *Railway Age* of July 23, page 48).

## Lackawanna to Inaugurate "Phoebe Snow" November 15

The "Phoebe Snow," the Delaware, Lackawanna & Western's new streamlined passenger train, will be put into operation between New York and Buffalo, N. Y., on November 15, W. H. Dominick, passenger traffic manager, has announced. Two complete units of the train will be installed, providing daily service in each direction. The westbound train from New York will leave Hoboken, N. J., at 10:30 a.m., and the eastbound train will leave Buffalo at 10:15 a.m.

Preliminary to introduction of the new service, christening ceremonies took place in the Hoboken passenger terminal on November 9, followed by a pre-inaugural run to Binghamton, N. Y., and return for the press, radio and magazine editors, mayors of cities between New York and Binghamton and officers of the railroad. On November 11, similar ceremonies were held at Buffalo, with a second pre-inaugural run to Binghamton and return, with similar groups of guests aboard. A third pre-inaugural run, from Hoboken to Binghamton and return, will be made on November 13, to enable officers and employees of the Lackawanna's passenger department, and the staffs of other departments, to ride the new train in recognition of their interest and effort. General chairmen of railroad labor organizations will be invited to represent employees of the company on the third run.

Installation of the "Phoebe Snow," named for the Lackawanna's "girl in white" who came upon the business scene in 1900, will mark the completion of purchases of new passenger-train equipment costing about $7,500,000. Other through passenger trains also are being re-equipped.

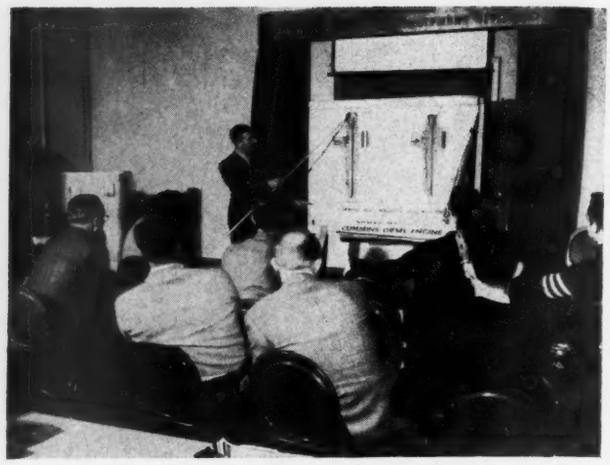
The "Phoebe Snow" in each direction will consist of eight or more cars, according to traffic requirements. Besides new coaches, there will be a dining car and a tavern-lounge car containing an observation section available to all passengers. The westbound train will carry a bedroom-roomette sleeping car, New York to Chicago.

## G. E. Diesel-Electric School

A Diesel-electric school is being conducted by the General Electric Company in its Erie, Pa., plant, where, G. E.'s Locomotive and Car Equipment Divisions offer instruction in operation, inspection and maintenance of that company's switching locomotives.

The program is tailored particularly for personnel who will be working on the locomotives when they are in service. Classes are kept small, with a limit of

Instructor points out features of partly completed G. E. 25-ton Diesel-electric switching locomotive



Trained expert giving presentation on his company's Diesel engine

about 20 people to a session. In this way, instruction can be personalized and kept flexible enough to meet the needs of the individuals in the case.

The school lasts a week and is offered free of charge. Selection of personnel to attend is made by the customer, who pays for the student's traveling and living expenses. There is no charge for enrollment, tuition, or books.

"Book learning" is kept to a minimum and practical work is stressed. Actual equipment parts are brought into the classrooms and the work is presented in everyday shop terms and practices. All sizes of Diesel-electric locomotives for industrial switching are observed on test and in actual operation on the test track.

A part of the course consists of tours through the Erie works to see the actual manufacturing processes. Students observe Diesel-electrics under construction in various stages of manufacture and see the components as they are assembled in the locomotives.

## Hear Another Plan for Unifying Chicago's South Side Stations

A proposal was made in Chicago last week which would have the four south side passenger stations consolidated into a single terminal adjacent to Union station on the city's west side. The plan—the third made in recent months—was offered by the Chicago South Side Planning Board, which suggested creation of a public authority to achieve the unification.

The proposal advocates the rerouting westward of Illinois Central freight and passenger trains, with only suburban trackage remaining on the lake front. The balance of the present I. C. right-of-way along Lake Michigan would be devoted to a super-highway, according to the plan.

Previous plans were drawn up by the I. C. and the Chicago Plan Commission, the former suggesting that any consolidated terminal should be located on the lake front and the latter favoring a site at Congress and Clark streets just south of the "Loop." Railroads using La Salle street, Grand Central and Dearborn stations feel that any consolidation would be too costly, and have expressed willingness, instead, to modernize existing facilities.

## O.K.'s St. Louis-Los Angeles L.C.L. Pool

Division 3 of the Interstate Commerce Commission has authorized the Atchison, Topeka & Santa Fe, Union Pacific, and Wabash to continue on a permanent basis the arrangement for pooling l.c.l. traffic between St. Louis, Mo., and Los Angeles, Cal., which was entered in 1943 pursuant to an authorization from the former Office of Defense Transportation. The commission's favorable report in the No. 30278 proceeding said that there was no opposition to the pooling plan, which results in expedited service and estimated annual savings of $152,664.

Under the plan, the Wabash loads the l.c.l traffic involved at St. Louis, and from day to day alternates the routing beyond its line. The cars are forwarded alternately over (1) the Wabash to Henrietta, Mo., and thence over the Santa Fe to Los Angeles; and (2) the Wabash to Kansas City, Mo., and thence over the U.P. to Los Angeles, the routing being changed every day. This involves some disregard of shippers' routing instructions since about 63 per cent of the traffic is routed by shippers; but the commission said that "no shipper has complained." It added that, "on the contrary, the service has been approved by shippers advisory groups and others."

The estimated annual saving of $152,664 is calculated on the basis of the car-miles saved (646,884 per year) as a result of forwarding one instead of two cars each day. The saving per car-mile eliminated was put at 23.6 cents. The commission also pointed out that a two-car operation would require additional equipment and additional switching.

Revenue from the pooled traffic accrues to the line over which it is transported. Prior to the arrangement, the Santa Fe and U.P. each handled "approximately the same amount" of l.c.l. between St. Louis and Los Angeles, and "they are of the opinion that a similar condition would exist should the arrangement be discontinued," the commission explained. It also said that both roads have continued solicitation of the traffic, and "there has been no undue slackening of competition" for it.

## Moles to Honor Dougherty

Richard E. Dougherty, retired vice-president of the New York Central System in charge of improvements and development, and former President Herbert Hoover, will receive the tenth annual Moles awards for outstanding contributions to construction and for exemplary careers as citizens at a dinner to be held in the Waldorf-Astoria Hotel, New York, on February 9, 1950. The Moles, an association of leaders in the heavy construction industry, have presented similar awards in each year since 1941 to one member and one non-member of the society.

## Jeffers, Former U. P. President, Hits "Unwise" Union Chiefs

William M. Jeffers, retired president of the Union Pacific, was quoted in a signed article in the November 4 Chicago Tribune as saying that "Unwise union leadership, excessive taxation and unfair truck competition are the three ills threatening railroad transportation. . . . I'm not a labor baiter. I carried a union card longer than most of the present membership. But I'm certainly against the present set-up."

Mr. Jeffers was interviewed by Hal Foust, a Tribune reporter, who made two separate trips between Chicago and Los Angeles, Cal., first in a cargo truck and later in freight locomotives and cabooses, to study rail and truck operations first-hand. In a series of articles in the

Tribune the reporter pointed out, among other things, that union featherbedding is inflating shipping costs by increasing operating costs, thus causing more diversion of freight to trucks with lower tariffs.

The former U. P. president was quoted in the fifth and concluding article of the rail-truck series as declaring: "On the labor side, the railroads are not getting eight hours' work for eight hours' pay. You've just ridden with train crews that got two days' pay for a 200-mi. run of five or six hrs. A structure like that can't last. It shouldn't last."

On the subject of trucks, Mr. Jeffers was quoted as follows: "I'm not an enemy of trucking. The Union Pacific donated the right of way for 800 mi. of the 1,000 mi. of Lincoln highway paralleling its tracks from Omaha, Neb., to Ogden, Utah. All that I advocate in regard to truckers is that they pay a fair portion of the total cost of building and maintaining the highways so passenger automobiles won't have to pay more than their share of these road costs."

## Freight Car Loadings

Loadings of revenue freight in the week ended November 5—the seventh consecutive week of major industrial strikes—totaled 578,981 cars, the Association of American Railroads announced on November 10. This was a decline of 12,336 cars, or 2.1 per cent, below the previous week, a decrease of 264,605 cars, or 31.4 per cent, under the corresponding week last year, and a drop of 331,189 cars, or 36.4 per cent, below the equivalent 1947 week.

Loadings of revenue freight for the week ended October 29 totaled 591,317 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS

| For the week ended Saturday, October 29 | | | |
|---|---|---|---|
| District | 1949 | 1948 | 1947 |
| Eastern | 112,092 | 162,348 | 167,361 |
| Allegheny | 90,084 | 186,795 | 194,706 |
| Pocahontas | 19,820 | 70,326 | 75,758 |
| Southern | 105,263 | 144,910 | 142,109 |
| Northwestern | 82,854 | 142,242 | 137,850 |
| Central Western | 130,878 | 148,793 | 150,722 |
| Southwestern | 50,326 | 75,559 | 72,240 |
| Total Western Districts | 264,058 | 366,594 | 360,812 |
| Total All Roads | 591,317 | 930,973 | 940,746 |
| Commodities: | | | |
| Grain and grain products | 54,877 | 58,293 | 52,064 |
| Livestock | 18,495 | 19,940 | 21,678 |
| Coal | 53,943 | 178,700 | 187,909 |
| Coke | 4,038 | 15,483 | 14,610 |
| Forest products | 41,782 | 51,472 | 48,591 |
| Ore | 7,284 | 67,482 | 62,208 |
| Merchandise l.c.l. | 88,465 | 110,857 | 123,258 |
| Miscellaneous | 322,433 | 428,746 | 430,428 |
| October 29 | 591,317 | 930,973 | 940,746 |
| October 22 | 589,088 | 926,976 | 954,627 |
| October 15 | 583,913 | 912,957 | 954,149 |
| October 8 | 574,228 | 891,651 | 956,862 |
| October 1 | 658,128 | 908,866 | 942,455 |
| Cumulative total 43 weeks | 30,150,002 | 35,887,592 | 37,167,083 |

**In Canada.**—Carloadings for the week ended October 29 totaled 87,944 cars, compared with 86,607 cars for the previous week, and 91,619 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

| | Revenue Cars Loaded | Total Cars Rec'd from Connections |
|---|---|---|
| Totals for Canada: | | |
| October 29, 1949 | 87,944 | 32,119 |
| October 30, 1948 | 91,619 | 36,643 |
| Cumulative totals for Canada: | | |
| October 29, 1949 | 3,239,982 | 1,327,777 |
| October 30, 1948 | 3,352,801 | 1,487,728 |

## I. C. C. Practitioners Hold Annual Convention

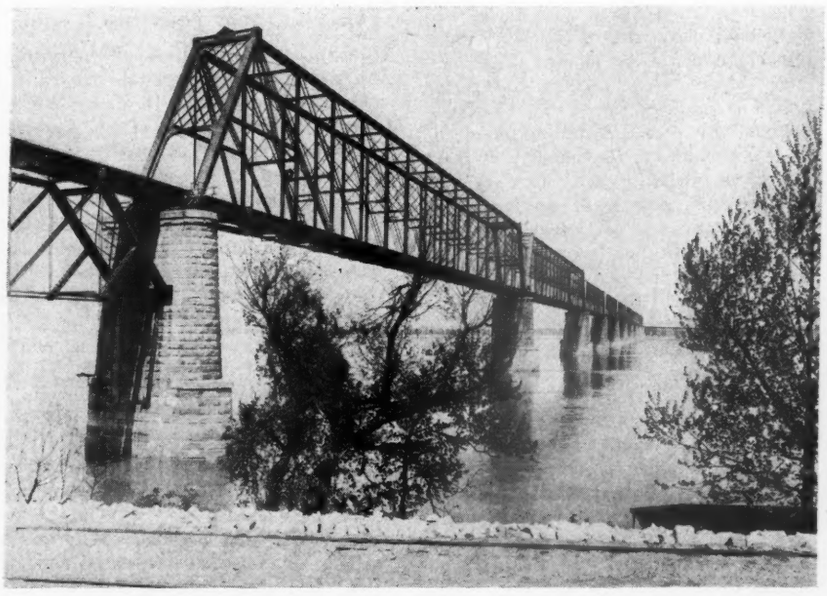
Roland M. Rice, assistant general counsel of the Association of American Railroads, was elected president for 1949-50 of the Association of Interstate Commerce Commission Practitioners at the organization's annual convention in New York on November 2-3. J. K. Hiltner, general traffic manager, United States Pipe & Foundry Co., was reelected secretary and Charles E. Bell was reelected treasurer.

Dr. Ford K. Edwards, director of the Bureau of Accounts and Cost Finding of the Interstate Commerce Commission, presented a paper during the November 2 morning business session on "The Use of Costs and Waybill Sampling in the Study of Rate Structures." Joseph H. Ball, ex-senator from Minnesota and vice-president of the Association of American Ship Owners, addressed the 20th annual group luncheon on the same day on "Some American Shipping Problems." Charles W. Braden, general traffic manager of the National Distillers Products Corporation, presided at the luncheon.

The November 2 afternoon business session was devoted to a forum on the question "How Could Our Country's Transportation Policy Be Improved?" Among the participants in the forum were Earl B. Smith, vice-president and director of traffic, General Mills, Inc.; Henry F. McCarthy, vice-president, New York, New Haven & Hartford, and Fairman Dick, of Dick & Merle-Smith.

"Very few of us users of transportation are in the transportation business as such," Mr. Smith said, "but the transportation system of this country is as much a part of our essential facilities for doing business as are the plants and other facilities which are used directly in the conduct of our respective businesses. . . We know that if our railroads, as our major agency of transportation, collapse and go under government ownership, they will carry with them all other agencies of transportation as well—with perhaps substantial losses to the security and equity holders—but, as far as the railroads are concerned, when that phase is passed, they are through. On the other hand, we users of transportation would have to live on in a changed relationship, a continuous, never-ending, day-to-day relationship with powers that could easily become wholly dictatorial in every respect.

"We cannot afford to see this come



**BIG BRIDGE UP FOR RENEWAL.— The Illinois Central has awarded to the American Bridge Company a contract to replace the superstructure of its 60-year-old Ohio River bridge at Cairo, Ill., shown here. The new superstructure will consist of 12 spans, two of them 518 ft. long, four 400 ft. and six 197 ft. The contemplated construction scheme calls for the erection of the new spans, complete with ties and rail, alongside the old structure. When the erection of each new span has been completed the corresponding old span will be cut free and allowed to drop into the river, and the new one will be rolled into place on the substructure. The old spans will be cut up for scrap. Fabrication of the new steel will begin in February, 1950, and the first field operations are scheduled for May 1. The entire project is expected to require 1½ years to complete**

### *Illinois Governor on Truck Fees*

**"It is clearly unjust to compel those who do the least damage to our highways to pay most of the cost of maintaining and rebuilding those highways. Last year, private vehicle owners paid 58.7 per cent of the motor license fees collected by the state (Illinois). The commercial vehicles — the trucks — paid 41.3 per cent. In gasoline tax payments, which involved estimates to some extent, the figures were 68.6 per cent paid by private car owners and 31.2 per cent by the truck operators.**

**"Taking together the license fees and gasoline tax payments, private passenger cars carried 65.1 per cent of the load, the trucks 34.9 per cent. The latter figure includes all trucks, not just the big carriers moving heavy loads. I agree fully with the conclusion reached by the legislative commission which studied this problem last year, that the share of the highway costs borne by the truck operators should be increased."**

***—From the Chicago Tribune, quoting a recent address by Governor Adlai Stevenson of Illinois***

about," Mr. Smith continued. "We cannot afford to see political dictation of those rates and charges which we must pay for our transportation services; or to see government control over the largest single unit of buying power in this country, nor the addition to our federal payroll of 10,000,000 or more additional voters. . . . We users of transportation must insist that we will profit by the experiences of the British people who yielded to the idea of government extending its power over their great industry of transportation; and by the experiences of the British users of transportation who, although they did not favor nationalization of the transportation industry, assumed it was not any of their direct responsibility and never exerted themselves as actively or persistently as did the proponents of nationalization.

"I urge," Mr. Smith concluded, "that we inaugurate and perpetuate some overall leadership in the field of transportation agencies; that there be an end to destructive selfish actions by one group and the costly and likewise selfish and destructive retaliations by another; that there be a new day in the matter of cooperation and coordination within and between the agencies of transportation and the users of transportation."

Mr. McCarthy said there was no doubt that great advantages would accrue to the railroad industry if government regulation were diminished. "Reduction in the power of government over the railroads is the only feasible method to enable the railroads to remain in the family of private enterprise," he went on. "Merely pointing out to the public the woes of the railroad industry will not help the industry. The time has come now to remove government regulation of rates, except for the establishment of maxima."

The main reason American railroads cannot attract funds from the investing public, said Mr. Dick, is because for the past 25 years the railroads have been permitted to earn only about 3½ per cent. During the last depression it was fashionable to say the railroads could not get new capital because traffic volume was low, Mr. Dick added. Another reason investors avoided the railroad field was supposed to be the inflated capitalization of the railroads. Neither analysis was correct, Mr. Dick explained, because for the past several years railroad traffic has been breaking records and railroad capitalization has been pared down sharply, and still investors will not give money to the railroads. The present rate structure, he concluded, is inherited from the days when railroads had a transportation monopoly. Rates must be allowed which will guarantee adequate earnings, which, in turn will attract additional capital, and the only method of obtaining the necessary rates would be a new rate structure based on the present competitive setup in transportation.

## Retires from I.C.C. Staff

Edwin C. Norris, chief of the Reviewing Section, Bureau of Formal Cases, Interstate Commerce Commission, retired on October 31 after 35 years of service on the commission's staff. Mr. Norris, who had held the position from which he retired since 1930, entered the employ of the commission in 1914 as a clerk in the Bureau of Safety.

## RR Magazine Editors Hold Their Largest Meeting

A variety of problems which confront editors of railway employee publications came in for discussion November 2-4, inclusive, by 39 members of the American Railway Magazine Editors' Association at the group's 27th annual convention in San Antonio, Tex. With a total registration of 63, including editors' families and guests, the meeting was the organization's largest. Jack R. Maguire, editor of the Texas & Pacific "Topics," was elected president.

Subjects discussed by various editors included the following: "How to Get and Keep Correspondents," Cliff Massoth, Illinois Central; "Where to Get Materials," Harold Freed, Norfolk & Western; and "How to Achieve Good Makeup and Balance in Text," Al Greco, the Pullman Company.

A symposium on "The Magazine in Employee Relations" was monitored by Ray Kirkland, Southern Pacific (Texas & Louisiana Lines), with the following participants: Cliff Somerville, Boston & Maine; Chris Hobson, T. & P.; Mel Shepherd, Atchison, Topeka & Santa Fe. Joining in a discussion of "The Role of the Magazine in Selling the Railroads to the Public" were the following: Virginia Tanner, Baltimore & Ohio; Hugh Fitts, Missouri Pacific; Marc Green, Chicago, Milwaukee, St. Paul & Pacific; and Blythe Baebler (monitor), St. Louis Southwestern.

In addition to Mr. Maguire, the following were elected officers of the association: First vice-president, Mr. Massouth; second vice-president, Mr. Greco; secretary, W. B. Grumley, New York, Chicago & St. Louis; and treasurer, Harry Tate, Jr., Missouri-Kansas-Texas.

## September Accident Statistics

The Interstate Commerce Commission has made public its Bureau of Transport Economics and Statistics' preliminary summary of steam railway accidents for September and the first nine months of 1949. The compilation, which is subject to revision, follows:

| Item | Month of September 1949 | Month of September 1948 | 9 months ended with September 1949 | 9 months ended with September 1948 |
|---|---|---|---|---|
| Number of train accidents* | 638 | 935 | 6,521 | 9,087 |
| Number of accidents resulting in casualties | 32 | 48 | 356 | 454 |
| Number of casualties in train, train-service and nontrain accidents: | | | | |
| Trespassers: | | | | |
| Killed | 125 | 154 | 987 | 1,087 |
| Injured | 95 | 121 | 855 | 878 |
| Passengers on trains: | | | | |
| (a) In train accidents* | | | | |
| Killed | — | — | 1 | 17 |
| Injured | 33 | 14 | 392 | 769 |
| (b) In train-service accidents | | | | |
| Killed | 1 | 1 | 15 | 18 |
| Injured | 169 | 193 | 1,561 | 2,056 |
| Travelers not on trains: | | | | |
| Killed | — | 1 | 4 | 6 |
| Injured | 61 | 76 | 560 | 752 |
| Employes on duty: | | | | |
| Killed | 31 | 43 | 299 | 425 |
| Injured | 1,619 | 2,598 | 17,104 | 23,486 |
| All other nontrespassers:** | | | | |
| Killed | 124 | 148 | 1,121 | 1,209 |
| Injured | 416 | 494 | 3,933 | 4,608 |
| Total—All classes of persons: | | | | |
| Killed | 281 | 347 | 2,418 | 2,762 |
| Injured | 2,393 | 3,496 | 24,405 | 32,549 |

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former caused damage of more than $250 to railway property in 1948. Beginning January 1, 1949, this minimum was raised to $275. Only a minor part of the total accidents results in casualties to persons, as noted above.

**Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers and nontrespassers,* were as follows:

| | | | | |
|---|---|---|---|---|
| Persons: | | | | |
| Killed | 116 | 140 | 1,025 | 1,102 |
| Injured | 262 | 334 | 2,519 | 2,861 |

## N. D. Governor Sees Bright Future for Northwest

The future of the Northwest seems to offer an adequate and growing volume of transportation business that represents a challenge to the railroads, Governor Fred G. Aandahl of North Dakota told the 90th regular meeting of the Northwest Shippers Advisory Board at Minot, N. D., on November 1.

In an address entitled, "The Growing Economy In Our Four States," Governor Aandahl pointed out that the public is basically sympathetic to the railroads because of the comfort, safety and convenience they have given to travelers for many decades and because of many years of economic freight service.

**Grading equipment working on a 4½-mi. line change of the Toledo, Peoria & Western near East Peoria, Ill. Equipment shown includes Caterpillar tractor-scraper combination and other units. This change of line has been necessitated by a flood-control project involving construction of several earth-fill dams**

Discussing the future economy, the governor commented that the Missouri Basin water development program will have as great a positive influence on the Northwest as the Homestead Act had in stimulating early settlement. Another encouraging sign is the strong probability of the manufacture of commercial gas, plastics, and liquid fuels from the low grade coal deposits of the area.

Recalling bumper crops of recent years, Governor Aandahl declared that "In the field of agriculture improvement, the friendly and able assistance of the agricultural development agents employed by the railroad companies has been most helpful and effective. I really take my hat off to those men and compliment them on the fine work they are doing. This statement is made after many years of close association with numerous activities of which they have been a part.

"When all of these factors are put together, they constitute encouraging evidence of constructive, wholesome, and long lasting progress and development headed with ample room for a modest increase in population."

At the morning meeting of the board, E. W. Coughlin, manager of the Railroad Relations Section of the Association of American Railroads, stated that close to $200 million can be saved through efficient use of freight cars. "The efficient use of freight cars, which bring in three-quarters of railroad revenue, and represent over one-fifth of the total railroad investment in roadway, equipment and structures, is a joint responsibility of both shippers, receivers and the railroads. If the railroads are to remain in business, shippers and receivers must eventually pay, in charges made for rail transportation, for any inefficiency in the use of the freight car fleet." Mr. Coughlin stated that there are three basic means of increasing efficiency of freight car operations: (1) Heaviest practicable loading; (2) fastest practicable turnaround through complete unloading and cleaning of incoming cars, and (3) observance of Car Service Rules.

## September Truck Traffic

Motor carriers reporting to the American Trucking Associations transported in September 3,864,112 tons of freight, an increase of 2.1 per cent above the previous month's total of 3,785,237 tons and 8.4 per cent above the 3,564,999 tons hauled in September, 1948. The figures, according to A.T.A., are based on comparable reports received from 336 carriers in 42 states.

## Waterman Can Begin Passenger Service

The Waterman Steamship Corporation, operator of the Arrow Line, has been granted temporary authority by the Interstate Commerce Commission to add passenger services to its present freight operations, which include intercoastal services between Atlantic and Pacific ports and coastwise services along both seaboards. The temporary authority expiring April 26, 1950, was granted pending action by the commission on Waterman's application for like authority on a permanent basis (see *Railway Age* of October 22, page 56).

## U. S. Chamber Committee To Consider Federal Aid

Tentative reports on Federal aid for highway construction, operation of the Federal Aid Airport Act, and subsidies to air carriers will be considered by the Transportation and Communication Department Committee of the Chamber of Commerce of the United States at a meeting in Washington, D. C., on December 2. Chairman Evans A. Nash of the committee instructed the staff to prepare these reports "for study looking to recommendations of chamber policy," the chamber's announcement said.

"The report on federal aid to highways," it continued, "will deal with the effect of the increasing popularity of the toll road method of financing major highways, as compared to the ordinary program of highway development through established state and federal financing channels. Chamber policies also will be reexamined in the light of

recent proposals that the states greatly increase their bonded indebtedness in order to more quickly modernize the nation's major highway system.

"Likewise, careful consideration will be given to the proportion of federal aid to state financing, in view of the U. S. Bureau of Public Roads recommendation for scrapping of the traditional 50-50 matching of federal-state funds in favor of a greater federal subsidy for improvements on the 38,000 mi. of interstate highways.

*(Continued on page 71)*

**Additional General News will be found on pages 71 and 74.**

# ORGANIZATIONS

## A.S.M.E. Annual Meeting

Cornelius Vanderbilt Whitney, assistant secretary, U. S. Department of Commerce, and Dr. H. J. Gough, president of the Institution of Mechanical Engineers of Great Britain, will be among the speakers on engineering contributions to a peaceful world at the 1949 annual meeting of the American Society of Mechanical Engineers. The meeting will be held at the Hotel Statler (formerly the Pennsylvania Hotel), New York, November 28 to December 1, inclusive.

Mr. Whitney will talk on the Possible Contributions of Engineers to World Peace at a luncheon to be participated in by the Gas Turbine Power, Aviation, and Power Divisions, and the American Rocket Society on November 29. Dr. Gough will be the speaker at the annual dinner at 6 p.m. on November 30. He will discuss peacetime engineering overseas.

Justice Arthur T. Vanderbilt, justice of the Supreme Court of New Jersey, will deliver the first Roy V. Wright Memorial Lecture at 5:15 p.m., November 29. He will talk on Standards for Citizenship.

Twenty-two professional divisions and committees will participate in 79 technical sessions. Tentatively, the program for the Railroad Division sessions is as follows.

TUESDAY, NOVEMBER 29

9:30 a.m.

Gas Turbine II—Railroad I

A 4,000-Hp. Gas-Turbine Locomotive, by W. A. Brecht, manager Transportation Engineering Department; Charles Kerr, Jr., consulting engineer, Transportation Department, and T. J. Putz, manager, Gas Turbine Engineering Department, Westinghouse Electric Corporation.

Gas-Turbine Power Plants in Locomotives, by R. A. Williamson, manager, Railroad Rolling Stock Division, and A. H. Morey, Locomotive Engineering Division, General Electric Company.

WEDNESDAY, NOVEMBER 30

9:30 a.m.

Railroad II—Materials Handling V

*Symposium on American Railroads—Our Largest Materials Handling Industry*:

Railway Rolling Stock—A Vital Problem in Materials Handling, by A. E. Perlman, general manager, Denver & Rio Grande Western.

Handling Supplies Used in Railroad Operation, by Carleton W. Meyer, assistant to the president, Chesapeake & Ohio.

2:30 p.m.

Railroad III—Materials Handling VI

*Symposium on American Railroads (continued)*

Modern Freighthouse Design and Operation.

Materials Handling Devices Used in Maintaining Railroad Rolling Stock, by S. H. Hammond, president, Whiting Corporation.

THURSDAY, DECEMBER 1

9:30 a.m.

Railroad IV—Management VII

*Symposium on Attracting Mechanical Engineering Graduates to the Railroad Industry*:

Discussion by:

F. K. Mitchell, manager equipment, New York Central System.

J. B. Akers, chief engineer, Southern System.

D. L. Wallace, counsellor on management, Cincinnati, Ohio.

12:15 p.m.

Railroad Division luncheon

2:30 p.m.

Railroad V

Progress in Railway Mechanical Engineering—Report of Committee RR-6 Survey, T. F. Perkinson, manager, transportation engineering division, General Electric Company.

Address by O. V. S. Bulleid, chief mechanical engineer, British Railways, Southern Region, London, England.

The Talgo Train, by J. M. Gruitch, director, research and development, American Car & Foundry Co.

The **Railway Business Woman's Association of Chicago,** will celebrate its twenty-fourth anniversary with a dinner on November 15, at 6:30 p.m., at the Sheraton hotel.

The 41st annual dinner of the **Railway Business Association** will be held at the Stevens Hotel, Chicago, on November 18. Ralph Budd, former president of the Chicago, Burlington & Quincy, and now chairman of the Chicago Transit Authority, will be the principal speaker. Norman C. Naylor, chairman of the executive committee of the association, will be the dinner chairman.

"Management Principles in a Changing Economy" will be the theme of the Second **Philadelphia Society for the Advancement of Management Conference** on December 2, at the Warwick Hotel, Philadelphia, Pa. John R. Bangs, director of industrial and personnel relations of the Budd Company, will talk on "The Human Side of Industrial Engineering."

With the cooperation of the **Rochester Chamber of Commerce,** the **Transportation Club of Rochester,** N. Y., has arranged for a series of seven lectures on certain phases of traffic administration and operation to be given at the chamber of commerce, at 7:45 p.m. on the second Monday of each month. The lectures, which began on October 10, will cover parcel post; air transportation; railroad operation; laws governing all forms of transportation; motor truck transportation; railway express service, and export and import traffic.

The **Toronto Railway Club** will hold its next regular monthly meeting in the Royal York Hotel on November 28, at 8 p.m. D. F. Cornish, sales engineer, Anaconda American Brass, Ltd., will give an illustrated talk on "Moving Ahead with Copper."

A. C. Yorke, general baggage agent of the Pennsylvania, Philadelphia, Pa., has been elected president of the **American Association of Baggage Traffic Managers.** Other officers elected are: Vice-president, A. S. Anderson, general baggage and mail agent, Canadian National, Toronto, Ont., and secretary-treasurer, E. P. Soebbing, assistant general passenger agent, Wabash, St. Louis, Mo.

The annual meeting of the **Society for Experimental Stress Analysis** will be held at the Hotel New Yorker, New York, on November 30 and December 1 and 2. Inquiries should be addressed to the society at P. O. Box 168, Cambridge 39, Mass.

The **Chicago Railroad Superintendent's Association** has elected the following new officers: President, C. L. Poole, superintendent of the Belt of Chicago; first vice-president, W. E. Curley, terminal superintendent of the Illinois Central, and second vice-president, R. D. Clousing, superintendent of the Atchison, Topeka & Santa Fe.

The **Eastern Car Foreman's Association** will hold its next meeting on November 18, in room 502, Engineering Societies building, 29 West 39th street, New York. "Facilities and Proper Procedure for Testing of Freight Trains at Inspection Points" will be the subject of an address by C. E. Carothers, engineer, Westinghouse Air Brake Company.

# SUPPLY TRADE

**William C. Bruton,** formerly sales engineer, has been appointed district sales manager for the American Manganese Steel division of the **American Brake Shoe Company,** with headquarters at Oakland, Cal., and **Robert H. Elem,** formerly welding engineer, has been appointed Pacific Coast manager of the welding products department, with headquarters at Los Angeles, Cal. Mr. Bruton's territory covers the Pacific northwest, including the Yukon territory and Alaska.

**Russell G. Davis** has been appointed a sales executive of the **Chain Belt Company,** Milwaukee, Wis.

**Chester M. MacChesney,** executive vice-president of **Acme Steel Company,** Chicago, has been elected chairman of the board of directors, succeeding the late **Charles S. Traer,** whose death was reported in the *Railway Age* of October 29. Mr. MacChesney became associated with Acme in 1916 as a design engineer, and later held positions as head of the engineering department and superinten-

dent of the firm's Archer Avenue plant, Chicago. In 1923 he was elected to the board of directors, becoming executive vice-president in 1948.

**Russell A. Stevens,** formerly Diesel department manager, Los Angeles (Cal.) branch, of **Fairbanks, Morse & Co.,** has been appointed manager of the company's Boston (Mass.) branch. He succeeds **V. O. Harkness,** who has assumed the duties of Diesel sales department manager for the Boston area.

**Paul Grevengoed** has been appointed advertising and sales promotion manager of the **Haskelite Manufacturing Corporation,** succeeding **John J. Paige,** who resigned recently. Since October, 1948, Mr. Grevengoed has served in the sales department, handling Plymetl sales to the railroads and car builders. A graduate of Calvin College and the University of Michigan, he served three years in the Navy as an engineering officer during the war. He joined Haskelite in January, 1948, in an engineering capacity, being transferred to the sales department the following October.

The **Portland Shingle Company,** Portland, Ore., manufacturer of Borgana, a new product for the treatment of boilers to prevent scale and corrosion, has appointed **Balfour Guthrie & Co.,** as distributors for this product on the Pacific Coast. **Kraig Munson,** sales engineer for Balfour Guthrie, will be in charge of selling the new boiler treatment in the Northwest.

**J. M. Brophy** has been appointed assistant manager of sales, a newly created position, for the **Chicago Railway Equipment Company,** Chicago.

**Harry J. Deines** has been named manager of advertising and sales promotion for the **Westinghouse Electric Corporation.** Mr. Deines will have responsibility for staff supervision and coordination of all Westinghouse advertising and sales promotion activities. He also will maintain basic company relationships with advertising agencies.

**Kermit R. Sadler** has been appointed general traffic manager of the **B. F. Goodrich Company,** with headquarters in Akron, Ohio, succeeding **R. W. Corns,** resigned. Mr. Sadler has been with the company since 1935 and, since 1943, has been manager of traffic and warehousing at the Los Angeles, Cal., plant.

**Robert E. Hunter,** formerly a district sales manager of **Electro-Motive Division** of **General Motors Corporation** in Chicago, has been appointed director of sales of the newly formed **General Motors Diesel, Ltd.,** with headquarters in the company's sales offices in the International Aviation Building, Montreal, Que. (see *Railway Age* of August 6, page 63). Succeeding Mr. Hunter is **Frederick W. Walker, Jr.,** manager of statistics and market analysis. General Motors Diesel, Ltd. will retain as sales consultants the **International Equipment Company,** Montreal, which has been, for many years, sales representative in Canada for Electro-Motive.

**Eugene P. Berg,** formerly general superintendent of the **Link-Belt Company's** Perishing Road plant in Chicago, has been appointed to the newly created position of assistant general manager of that plant. **Richard Moyer,** formerly superintendent of the steel shop at the Perishing Road plant, has been named general superintendent, manufacturing department, there.

### *OBITUARY*

**Martin Tinsley,** vice-president and treasurer of the Collins Oil & Manufacturing Co., 90 West street, New York, died on November 6. He was 74 years old.

**Charles Edward Brown, Jr.,** vice-president and general sales manager of the Okonite Company, died on November 8. He was 55 years old.

**C. C. Sheppard,** former president of the Southern Pine Association, died on November 3 at his home in Clarks, La., after many years of service to the Southern pine lumber industry.

# EQUIPMENT AND SUPPLIES

## Pennsylvania Orders 226 Diesel Locomotives

The Pennsylvania has placed orders for 226 new Diesel-electric locomotives to cost about $38 million.

The Pennsylvania now has in service 594 Diesel-electric locomotives, with 1,062,300 total horsepower. Those just ordered will add 370,800 horsepower, giving the road a total of 1,433,100 Diesel horsepower for the 820 locomotives.

The Pennsylvania expects the new locomotives—45 for road freight service, 5 for road pasenger service, and 176 for yard switching, transfer and local freight service—to enable the road to round out its Diesel operations and achieve the maximum economy and efficiency to be derived from the use of this type of motive power. The new orders constitute the largest single purchase of Diesels ever made by the Pennsylvania.

The new road locomotives will be assigned to main-line service in various parts of the system. The 176 new Diesel switchers, added to 449 already in operation, will enable the Pennsylvania to completely Dieselize its switching operations at many points over the railroad.

The Pennsylvania points out that it will continue to be the largest user of coal-burning and electric locomotives, while the latest orders will make it also the largest operator of Diesels.

The orders are being distributed among the following builders: American Locomotive Company; Baldwin Locomotive Works; Electro-Motive Division, General Motors Corporation; Fairbanks, Morse & Co.; General Electric Company, and Lima-Hamilton Corporation. Deliveries are scheduled to begin in January, 1950, and are expected to be substantially completed by August, 1950.

### *FREIGHT CARS*

## 4,532 Freight Cars Delivered in October

Freight cars for domestic use delivered in October totaled 4,532, including 1,704 delivered by railroad shops, compared with September deliveries of 6,141 cars, which included 2,205 delivered by railroad shops, the American Railway Car Institute has announced. October deliveries included 843 box cars, 1,883 hopper cars, 873 gondola cars, 145 refrigerator cars, 317 tank cars, 465 flat cars and 6 cars of other types.

Freight cars ordered last month for domestic use amounted to 201, compared with September orders for 123, the institute said. In both months all orders were placed with contract builders. The backlog of cars on order on November 1 was 17,377, including 9,783 on order from railroad shops, compared with 22,203 cars on order on October 1 and 111,405 on order on November 1, 1948.

### *SIGNALING*

The **Peoria & Pekin Union** has placed an order with the General Railway Signal Company for a control machine to be used in an all-relay electric interlocking at Peoria, Ill. The 12- by 12-in. control panel will have four track lights and two levers for the control of a switch machine, and five signals at a junction with the Toledo, Peoria & Western.

# CAR SERVICE

W. E. Callahan, manager of the Car Service Division's Open Car Section, sent to railroad transportation officers a November 4 "mailgram," urging action to expedite the return to home roads of gondola and hopper cars. "Despite the substantial drop in the weekly loadings of gondolas and hoppers for the past six weeks or more, the return of these types of equipment to home rails has been disappointing," Mr. Callahan said. He went on to predict a settlement of the coal and steel strikes in the "near future," adding that the result will be "very heavy" demands for hoppers and gondolas.

"To best protect the heavy demands,"

he urged all roads to make effective this program: Require prompt return of all hoppers and gondolas to owners in accordance with Car Service Rules and outstanding special orders, excepting only such cars as are temporarily stored empty for owner's convenience; release foreign open tops from service in handling such traffic as sand, gravel and sugar beets; concentrate on and expand "to the fullest possible extent," work program for maximum repairs "to the present generally excessive number of hoppers and gondolas in bad order."

"Within a very short period every open top car owned will be urgently needed and the highest degree of efficiency will be essential to meet transportation requirements and avoid serious shortages of equipment," Mr. Callahan said in closing.

## CONSTRUCTION

**Duluth, Missabe & Iron Range.**—This road, in cooperation with private contractors, is engaged in the following projects, scheduled for completion in 1950: Replace timber bridge No. 73-A, Allen Junction, Minn., with a steel structure, the steel being furnished by the American Bridge Company ($79,100); construct new steel deck on bridge No. SL-10A, near Duluth, Minn., with American Bridge Company fabricating and furnishing the steel ($29,500); install new track system to serve the Douglas Mine near Chisholm, Minn., grading being performed by the Douglas Mining Company ($94,000); lay new tracks to serve the Schley Mine near Gilbert, Minn., with Associated Builders, Virginia, Minn., doing the grading ($108,000); and construct new steel approaches and steel deck on bridge No. A-52A near Bovey, Minn., with American Bridge Company fabricating and furnishing the steel ($60,000). Completion is expected in November of installation of new tracks to serve the Gross-Marble Mine near Coleraine, Minn., the grading having been performed by the Runquist Construction Company, Duluth ($107,900), and laying of new track for the Miller Mine near Aurora, Minn., with grading work by the Missabe Construction Company, Hibbing, Minn. ($37,200).

**Great Northern.**—Company forces of this road are engaged in the following projects, estimated costs of which are shown in parentheses: Install Propane switch heaters, St. Paul, Minn. ($24,950); complete bridge and culvert work on the Butte (Mont.) division ($62.535) and on the Cascade division ($157,594); renew portion of bridge No. 91.4, Vancouver, B. C. ($27,500); extend passing track, Simcoe, N. D. ($28,300); construct siding for Zonolite Company, Libby, Mont. ($23,325); install additional tracks, East Grand Forks, Minn. ($39,550) and temporary tracks at Naylor, Wash. ($28,800); construct lunch and locker room at Minneapolis Junction, Minn. ($27,425); install fire protection, St. Paul ($22,600) and water system for fire protection, Hillyard, Wash. ($24,550); remove sliding material, Monitor, Wash. ($25,000); and renew two overhead bridges at Vancouver ($53,400) and overhead bridge at 26th avenue, Seattle, Wash. ($24,000). In cooperation with Intrusion-Prepakt, Inc., G. N. forces are repairing concrete linings in tunnel No. 18, Samish, Wash. ($35,000) and tunnel No. Q5, Wayne, Mont. ($20,000).

**Louisville & Nashville.**—Company forces will install a four-brush mechanical car washer at Nashville, Tenn., at an estimated cost of $25,500. The railroad will also construct an acetylene generating plant at Strawberry, Ky., to be used in dismantling freight cars, at a cost of approximately $22,900, including material and labor.

**Minneapolis, St. Paul & Sault Ste. Marie.**—This road has awarded a contract to the Stahr Company, Minneapolis, Minn., for construction of an ice storage house at Shoreham shops, Minneapolis. The structure will cost an estimated $25,000.

**Pennsylvania-Reading Seashore Lines.**—In compliance with an order of the New Jersey Board of Public Utility Commissioners, traffic on this company's Cooper's Point branch in Camden, N. J., will be rerouted over lines of the Pennsylvania to eliminate 14 grade crossings in Camden, to remove the railroad line from the entrance to the Delaware River highway bridge, and to provide room for construction of two additional bridge entrance highways that are on the state highway department's program. The crossings to be eliminated are those at Tenth and Carman streets; Federal street; Market street; Ninth street; Cooper street; Eighth and Penn streets; Seventh and Linden streets; Sixth street; Pearl street; Fifth and Birch streets; Fourth and Elm streets; Third

**The Canadian National has recently opened this new steam generating plant at Montreal, Que., to supply steam requirements for its Central station and all other buildings and equipment in the station area. The building, 65 ft. high, 106 ft. long and 86 ft. wide, is of steel frame construction with brick walls and concrete floor. It has a storage capacity of 61,000 gal. of oil and 360 tons of coal, and a present steam generating capacity of 105,000 lb. per hr., which can be increased if necessary to an ultimate total of 450,000 lb. per hr. by substituting a larger boiler for one of the present ones, installing a new boiler and extending the building to provide for two more. Smoke is mechanically washed, and soot and ash are concentrated in the receiver shown to the right of the Thermix stacks. The plant was designed and built by the railroad's own architectural, engineering and mechanical departments**

street; Second and Vine streets, and Front street. Traffic over the 14 crossings averages 85,000 motor vehicles per weekday, while week-end travel over the Delaware River bridge has increased to such an extent that two additional lanes are being constructed on the bridge itself, making a total of eight lanes. The relocation and elimination order requires completion of the work within one year following approval of plans. The cost, well over $1 million, will be shared by the Delaware River Joint Commission, the New Jersey Highway Department, the Public Utility Commission and the P.-R.S.L.

**Union Pacific.**—This road has applied to the Interstate Commerce Commission for authority to construct and operate a 17.26-mi. line between Hinkle, Ore., and Juniper. The line would be owned by the U.P.'s subsidiary, the Oregon-Washington Railroad & Navigation, and would be part of a project for relocating the U.P.'s main line along the Columbia river in the area where the McNary dam and reservoir are being built by the federal government. The existing line, which the same application seeks authority to abandon, extends from Messner, Ore. to Juniper, 31.06 mi. Because the relocated main line will include a section of a U.P. branch between Messner and Hinkle, the new construction involved in the plan is only 17.26 mi., as noted above. The application stated that the federal government would pay $2,700,000 toward the cost of the line change and the relocation of U.P. yards at Wallula, Wash.

# ABANDONMENTS

**Chicago, Burlington & Quincy.**—A proposed report by Examiner A. G. Nye of the Interstate Commerce Commission has recommended to Division 4 of the Commission that this road be authorized to abandon 23.43 mi. of branch line between Kirksville, Mo., and Green City.

The line was built in 1870-81, and its present condition restricts both train speed and load limit. Examiner Nye noted that the C.B.&Q. would be forced to make extensive and costly repairs if the line were continued; and that all freight to and from all stations on the line during 29 months ending May 31 of this year "averaged considerably less than one carload per trip."

**Application** has been filed with the Interstate Commerce Commission by:

**Union Pacific.**—To abandon operations over 31.06 mi. of its present main line along the Columbia river between Messner, Ore., and Juniper. The line will be inundated when the federal government completes the McNary dam and reservoir project; and the same application seeks authority to construct a 17.26-mi. section of track between Hinkle, Ore., and Juniper, which will be part of a new Messner-Juniper main line. Also, in the same application, the U.P.'s subsidiary, Oregon-Washington Railroad & Navigation, seeks authority to abandon the line involved in the operations abandonment proposed by the U.P.

# FINANCIAL

**Alleghany Corporation.**—*Sells Rock Island Common.*— S. R. Arias and associates have purchased from Alleghany its remaining holdings of more than 120,000 shares of the common stock of the Chicago, Rock Island & Pacific.

**Erie.**—*Trackage Rights.*—This road has asked the Interstate Commerce Commission to issue an order requiring the New York Central to give it trackage rights over N.Y.C. tracks and terminal facilities in the so-called Lower-town section of Lockport, N. Y. The International, which is applicant in another proceeding for authority to abandon its line between North Tonawanda, N. Y., and Lockport, has had trackage rights over the N.Y.C. facilities involved. The International line includes an Erie branch from North Tonawanda to Transit road in Lockport, which International has been operating under lease; and its own tracks from that point to a connection with the N.Y.C. facilities. If the International's abandonment application is granted, the Erie proposes to take over the operation of the leased branch and buy the International's line in Lockport. Its present application said that it advised the N.Y.C. of these plans, but the Central refused to grant it the trackage rights. The request for an order requiring that the rights be granted also asked the commission to fix "just and reasonable" compensation to be paid the N.Y.C. for use of the facilities.

**Huntingdon & Broad Top Mountain**—*Compensation of Trustee.*—Division 4 of the Interstate Commerce Commission has approved compensation at the annual rate of $4,000 to be paid C. Stevenson Newhall as trustee of this road. The approval order stipulated that Mr. Newhall shall receive no other salary or compensation from the estate of the debtor road.

**Illinois Central.**—*Progress of Refinancing Plan.*—This road has announced that another major step in the simplification and improvement of its financial structure has been completed, with the signing and delivery by the railroad to the Guaranty Trust Company of New York, trustees, of a new consolidated mortgage. (The road's refinancing plan was outlined in the *Railway Age* of September 24, page 70). The new mortgage, which covers the entire railroad, provides for the exchange of $52,000,000 of the total of $81,000,000 in outstanding bonds maturing in 1950-1955 for bonds carrying a 3¾ per cent coupon. The success of the plan is demonstrated by the deposit of approximately $25,000,000 of the bonds to be exchanged. The time for additional deposits has been extended from October 28 to November 22.

## New Securities

**Application** has been filed with the Interstate Commerce Commission by:

**St. Louis-San Francisco.**—To assume liability for $4,080,000 of series E equipment trust certificates to finance in part acquisition of 29 Diesel-electric locomotives from the Electro-Motive Division of General Motors Corporation. The locomotives, costing an estimated total of $5,414,860, will include 15 1,500-hp. road switchers costing $153,333 each and 14 2,250-hp. passenger locomotives costing $222,490 each. The certificates would be dated December 1, would mature in 15 annual installments of $272,000 each, beginning December 1, 1950, and would be sold on competitive bids.

Division 4 of the I.C.C. has **authorized:**

**Southern Pacific.**—To assume liability for $15,780,000 of series CC equipment trust certificates to finance in part 41 Diesel-electric locomotives, 1,410 freight cars and 8 passenger-train cars at an estimated total cost of $23,692,062 (see *Railway Age* of October 15, page 71). The certificates will be dated November 1 and will mature in 15 annual installments of $1,052,000 each, beginning November 1, 1950. The commission's report approved a selling price of 99.131 with a 2⅛ per cent interest rate—the bid of Halsey, Stuart & Co. and 32 associates, which will make the average annual interest cost approximately 2.26 per cent. The certificates were reoffered to the public at prices yielding from 1.2 to 2.5 per cent, according to maturity.

## Dividends Declared

Albany & Vermont.—$1.25, semiannual, payable November 15 to holders of record November 1.

North Pennsylvania.—$1.00 quarterly, payable November 25 to holders of record November 18.

Pittsburgh, Youngstown & Ashtabula.—7% preferred, $1.75, quarterly, payable December 1 to holders of record November 21.

## Average Prices Stocks & Bonds

| | Nov. 7 | Last week | Last year |
|---|---|---|---|
| Average price of 20 representative railway stocks ..... | 39.30 | 38.33 | 44.18 |
| Average price of 20 representative railway bonds ..... | 87.26 | 87.03 | 87.65 |

# RAILWAY OFFICERS

## FINANCIAL, LEGAL & ACCOUNTING

**John C. DeMar,** whose retirement as general solicitor of the Minneapolis & St. Louis at Minneapolis, Minn., was reported in the *Railway Age* of November 5, was born on September 27, 1879, in Davis County, Iowa. Following gradu-

ation from Drake University Law School, Des Moines, Iowa, in 1902, he was admitted to the bar, and subsequently engaged in private law practice in Des Moines. In 1935 he was appointed Iowa commerce counsel (attorney to the state commerce commission). Mr. DeMar joined the legal staff of the M. & St. L. in 1939 as assistant to counsel for the reorganization manager. When reorganization of the road was completed in December, 1943, he was appointed general attorney, and, two years later, was advanced to general solicitor.

**Arthur F. Stinson,** assistant to the vice-president of the New York, New Haven & Hartford at Boston, Mass., has been elected treasurer, with headquarters at New Haven, Conn., succeeding **William R. Benjamin,** who retired from active railroad service on November 1. **R. H. Breitenstein** has been appointed an assistant treasurer. A biography and photograph of Mr. Benjamin were published in the *Railway Age* of January 29, page 49.

**Arthur F. Stinson**

Mr. Stinson is a native of Naugatuck, Conn., where he attended the public schools. He has been connected with the New Haven since 1917, when he began his career as assistant bookkeeper for the Central New England. Successively promoted to general bookkeeper, accountant and general accountant, Mr. Stinson was named assistant to the vice-president in January of this year.

**Lionel Cote,** counsel of the Canadian National for the province of Quebec, has been appointed also assistant general solicitor of the system, with headquarters at Montreal, Que. **Andrew K. Dysart,** assistant general solicitor at Montreal, has been named commission counsel.

**George D. Daughtry,** assistant to auditor of disbursements of the Atlantic Coast Line, has been appointed assistant auditor of disbursements, with headquarters as before at Wilmington, N. C.

## OPERATING

**A. C. Novak,** assistant superintendent of the Chicago, Milwaukee, St. Paul & Pacific, at Dubuque, Iowa, has been promoted to superintendent of the Milwaukee-Kansas City Southern joint agency at Kansas City, Mo., succeeding **R. A. Woodworth,** who has voluntarily retired after more than 40 years of service. **F. G. McGinn,** trainmaster at Portage, Wis., has replaced Mr. Novak, and has been succeeded in turn by **T. E. Witt,** trainmaster at Austin, Minn. Succeeding Mr. Witt is **G. H. Lane,** assistant superintendent at Milwaukee, Wis. **W. E. Swingle,** acting assistant superintendent at Milwaukee, has replaced Mr. Lane.

**M. S. Jones,** assistant trainmaster of the Richmond district of the Atlantic Coast Line at Rocky Mount, N. C., has been appointed trainmaster of that district. **J. H. Capps,** assistant trainmaster of the Charleston district at Charleston, S. C., has been appointed trainmaster of that district.

**J. W. Harman,** assistant superintendent of the Montreal terminals of the Canadian Pacific, has been promoted to superintendent of those terminals, succeeding **G. E. Mayne,** assigned to other duties. **G. A. Drummond** succeeds Mr. Harman as assistant superintendent. **W. J. Presley,** assistant superintendent at Smith's Falls, Ont., has been transferred to the Farnham division, with headquarters at Farnham, Que., succeeding **J. G. Coleman,** transferred.

**J. Garland Woodall,** superintendent terminals of the Southern at Birmingham, Ala., has been appointed trainmaster, with the same headquarters, succeeding **Thomas D. Moore, Jr.**

**John J. Van Bockern,** assistant superintendent of the Davenport, Rock Island & North Western (a subsidiary of the Chicago, Milwaukee, St. Paul & Pacific and Chicago, Burlington & Quincy) at Davenport, Iowa, has been promoted to general manager at that point. He succeeds the late **Frank S. Weisbrook,** whose death is reported elsewhere in these pages. **John P. Fennelly,** secretary, treasurer and auditor at Davenport, has also been appointed superintendent. A native of Lennox, S. D., Mr. Van Bockern received his education in his home town and at the University of South Dakota. During school vacations he worked as water boy and section laborer for the Milwaukee. After completing his education he returned to the Milwaukee to serve in various positions, including road-master and trainmaster. In 1944 he was transferred to Davenport as terminal trainmaster, becoming assistant superintendent of the D.R.I.&N.W. in 1947.

Effective November 1, the Pennsylvania's Central Pennsylvania and Eastern Pennsylvania general divisions were consolidated into the Eastern Pennsylvania division, with headquarters at Harrisburg, Pa., and **A. J. Greenough** as general superintendent. On the same date, the Philadelphia Terminal division, with headquarters at Philadelphia, Pa., and **J. S. Gillum** as superintendent, was extended to include that portion of the former Wilkes-Barre division from Norristown, Pa., to a junction with the Lehigh Valley at Newton, Pa. As reported on page 72 of the *Railway Age* for November 5, the balance of the Wilkes-Barre division was combined with the former Williamsport division, to form a new Susquehanna division, under the jurisdiction of **P. W. Neff,** superintendent, with headquarters at Williamsport, Pa.

## TRAFFIC

**Arnold W. Morgan,** whose appointment as general freight agent of the New York Central at Chicago, was reported in the *Railway Age* of October 22, was born on November 29, 1892, at Columbia, Ill. He entered the service of the N.Y.C in 1907 as a messenger at East St. Louis, Ill., and held various clerical positions there until his appointment as soliciting freight agent at St. Louis, Mo., in 1916. From 1920 to 1928 he served as traveling freight agent, with headquarters at St. Louis, being transferred next to Houston, Tex., as general agent in the freight department. He held the same post at Milwaukee, Wis., between 1933 and 1937, following which he went to Chicago as general freight agent of the Indiana Harbor Belt (N. Y. C. affiliate). Since 1948 Mr. Morgan has been general coal freight agent of the N. Y. C. at Chicago, which position he held before his recent appointment.

**Robert P. Williams,** traveling freight agent of the Chesapeake & Ohio, has been appointed general agent, with headquarters as before at Wilmington, N. C., to succeed **J. A. Bodine,** who will retire on October 31, after 35 years of service with that road. **Charles R. Sargent,** commercial agent at Louisville, Ky., has been appointed general agent, with the same headquarters, succeeding **L. F. McFarland,** who will retire on October 31, after 26 years of service with the C. & O.

**Ralph A. Klotz,** chief rate clerk in the passenger traffic department of the Chicago, Milwaukee, St. Paul & Pacific, has been promoted to assistant to passenger traffic manager at Chicago, succeeding **Walter E. Cooper,** who retired on October 31 following more than 57 years of continuous service with the Milwaukee.

**E. D. Stratton** has been appointed general agent of the Missouri Pacific, with headquarters at Topeka, Kan., succeeding **C. A. Buell,** who has retired after more than 45 years of service with the M. P.

**James W. Lee** has been appointed assistant freight traffic manager of the Southern at Raleigh, N. C., succeeding **Charles C. Correll,** who has been transferred to Chattanooga, Tenn., to succeed **George W. Frank,** deceased.

Mr. Lee was born at Shelbyville, Ky.,



*News Department continued on next left-hand page*

# TOMORROW'S SWITCHER HERE TODAY!

## B & O ORDERS 10

LINKING 13 GREAT STATES WITH THE NATION

**B. & O. Orders 10 Diesels**

The Baltimore & Ohio Railroad has ordered ten 1,000-horsepower diesel switching locomotives from the Lima-Hamilton Corporation, it was announced yesterday. Units for the B & O are the same type as those recently delivered by Lima-Hamilton from its Lima Locomotive Works Division, Lima, Ohio, to the Nickel Plate, the Erie, and the New York Central Railroads.

New York Times
Oct. 12, 1949

LIMA HAMILTON CORPORATION

**LIMA LOCOMOTIVE WORKS**

*Division of the Lima-Hamilton Corporation*

**LIMA, OHIO**

on August 13, 1906, and attended high school at Frankfort, Ky., and business college at Lexington, Ky. He entered the employ of the Southern as a clerk at Lexington in April, 1929, and, after serving for a brief time at Cincinnati, Ohio, as a clerk-stenographer, was transferred to Detroit, Mich. In July, 1936, he was promoted to chief clerk to the general agent, and in February, 1938, was appointed traveling freight and passenger agent, becoming commercial agent in July, 1939, and assistant general freight agent at Jacksonville, Fla., on October 1, 1945. Mr. Lee held the latter position at the time of his recent appointment as assistant freight traffic manager at Raleigh.

**R. L. Murphy,** assistant general freight agent of the Erie at Cincinnati, Ohio, retired on November 1, under the pension rules of the company, after more than 27 years of service.

**Andrew G. Oldenquist,** assistant general passenger agent of the Erie at Chicago, has been promoted to general passenger agent at Cleveland, Ohio, succeeding the late **Alfred Fynn,** whose death on September 25 was reported in the *Railway Age* of October 1. **Vernon F. Green,** division passenger agent at Buffalo, N. Y., has been appointed assistant general passenger agent at Youngstown, Ohio, succeeding **Ronald E. Towns,** who has been transferred to Chicago. **Gerald Saunders,** traveling passenger agent at New York, has been appointed division passenger agent at Youngstown, succeeding **O. B. Chapman,** who has been transferred to Buffalo to succeed Mr. Green.

Mr. Oldenquist began his railroad career 30 years ago with the Boston & Maine and eight years later switched to the Erie's traffic office at Boston, Mass. He served as time table clerk at New York, traveling passenger agent out of Chicago, city passenger agent at New York, and since 1942, as assistant general passenger agent at Chicago.

**John E. Lonn,** assistant foreign freight agent of the New York Central System at Chicago, has been promoted to foreign freight agent at that point, succeeding **W. P. Hansen,** who has retired.

**Noble M. Kean,** assistant general passenger agent of the Chicago & North Western at Chicago, has retired.

## ENGINEERING & SIGNALING

**John Ayer,** assistant engineer of capital expenditures for the Denver & Rio Grande Western at Denver, Colo., has been promoted to assistant chief engineer at that point. He is succeeded by **Bert Byars,** chief clerk in the engineering department at Denver.

**Richard A. Bardwell** has been appointed engineer of tests for the Chicago & Eastern Illinois, with headquarters at Danville, Ill. For the past 12 years Mr. Bardwell has been service engineer for the National Aluminate Corporation in charge of water treatment on the C. & E. I., Chicago, Indianapolis & Louisville and Toledo, Peoria & Western.

The Missouri Pacific has abolished the position of chief engineer, maintenance of way, formerly held by **Albert A. Miller,** whose recent retirement was reported in the *Railway Age* of November 5. The jurisdiction of the chief engineer has been extended to include maintenance of way and structures. The title of **P. P. Wagner,** assistant chief engineer, has been changed to assistant chief engineer—construction, and that of **A. B. Chaney,** assistant engineer maintenance of way, to assistant chief engineer—maintenance.

## MECHANICAL

**R. B. Dulaney,** assistant to foreman car department of the Atlantic Coast Line, has been appointed assistant superintendent car department, with headquarters at Wilmington, N. C.

**Grant H. Arrasmith** has been appointed mechanical inspector for the Chicago, Burlington & Quincy at Chicago, succeeding **A. H. Ostberg,** who has retired after 44 years with the Burlington.

## SPECIAL

**Eric B. Herdman,** whose appointment as manager of personnel of the Denver & Rio Grande Western, with headquarters at Denver, Colo., was reported in the *Railway Age* of October 15, was born on May 20, 1897, in Birmingham, England. He attended King Edward's grammar and high schools and the University of Birmingham for two years. Upon coming to the United States, he joined the Atchi-

Eric B. Herdman

son, Topeka & Santa Fe, working as brakeman, switchman and conductor. From 1920 to 1923, he was employed by the Southern Pacific as switchman, yardmaster and assistant trainmaster and subsequently held similar positions on the Union Pacific. In 1937 he became trainmaster on the Chicago, Rock Island & Pacific, and, after holding the positions successively of assistant superintendent and superintendent, entered Rio Grande service in 1943 as assistant trainmaster. Mr. Herdman served as trainmaster and division superintendent on the Rio Grande before his appointment as manager of personnel.

**George A. Callahan** has been appointed manager of protection services of the New York, New Haven & Hartford, with headquarters at Boston, Mass. Mr. Callahan will have charge of the police department of the road, and will supervise crime prevention and direct anti-pilferage and loss and damage activities on the system. After attending New York

George A. Callahan

City public schools, Mr. Callahan was graduated from Fordham University in 1927 and from Fordham Law School in 1930. Following three years of active law practice, he was with the Federal Bureau of Investigation for five years, resigning to take charge of police activities for Lord & Taylor, New York, where he has been for the past 10 years.

**Peter W. Ackerman,** assistant chief of personnel for the Denver & Rio Grande Western at Denver, Colo., has been appointed assistant superintendent of safety, succeeding **Clyde E. Hightower,** who is entering the road's officer training program as assistant to the assistant general manager.

## OBITUARY

**Frank S. Weisbrook,** general manager of the Davenport, Rock Island & North Western, with headquarters at Davenport, Iowa, died in that city on October 23. Mr. Weisbrook was born at Fort Madison, Iowa, on September 23, 1876, and began his career with the D.R.I. & N.W. in March, 1900, as a rodman. From 1901 to 1902 he served as draftsman, and subsequently became chief clerk and engineer. He was appointed roadmaster in 1918, and continued in that post until his appointment as general manager in 1927.

## General News

(*Continued from page 64*)

"In its consideration of the existing chamber policy on airports, the committee will appraise the operation of the Federal Airport Act and the accomplishments under that act to date. It will also give consideration to any changes in the act indicated by experience under it during the three years of its operations. An important consideration in the committee's discussion of air subsidy will be the feasibility of separating subsidy and payment for carriage of air mail, and factors to be given weight in any determination of a service rate or rates for the carriage of mail."

The announcement also said that the committee will give further consideration to Hoover Commission recommendations relating to government organization and activities in the transportation and communication fields, and to transportation studies now being made by the Senate committee on interstate and foreign commerce and by the Department of Commerce. The latter study is being made for President Truman.

### Integration, Central Transport Control Proposed in Canada

Control of Canadian transportation under a central authority, and extension to commercial trucking of the same kind of regulation to which the railroads are subject were advocated last week before the Royal Commission on Transportation, now in session at Ottawa, Ont., by a group of some 20 railway unions, representing about 112,000 members.

The government of Prince Edward Island also told the commission that all forms of transportation in that province should be coordinated and integrated. The island presentation was apparently the first step in a move for similar integration in other provinces, but indications were that the proposal would be strongly opposed by some provinces and by trucking interests.

Other recent developments before the commission included release of a brief from the boards of trade and chambers of commerce of the Peace River, Alta., area, calling for a rail outlet from that region to the Pacific coast (see article on page 50 and news article on the Pacific Great Eastern); a union suggestion that freight rates should be increased if the railroads need higher rates in order to raise wages, and a union admission that no thought had been given as to whether the country could stand another rate increase.

### Venue-Restricting Pact Void Under Federal Liability Act

Contracts restricting the choice of venue for court actions based upon the Federal Employers' Liability Act are void, according to a November 7 ruling by the United States Supreme Court.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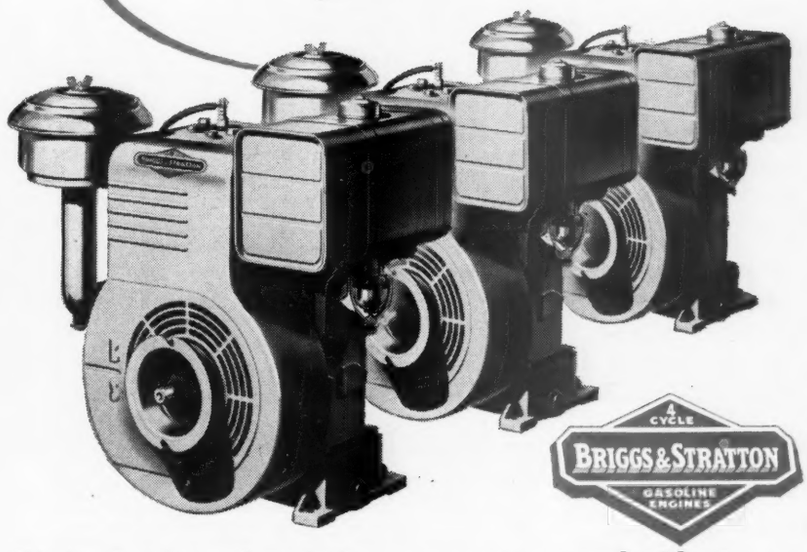


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BRIGGS & STRATTON CORPORATION
Milwaukee 1, Wis., U. S. A.




*News Department continued on second left-hand page.*

# Freight Operating Statistics of Large Steam Railways — Selected

| | Region, road and year | Miles of road operated | Locomotive-miles: Train-miles | Locomotive-miles: Principal and helper | Locomotive-miles: Light | Car-miles: Loaded (thousands) | Car-miles: Per cent loaded | Ton-miles (thousands): Gross excl. locos. & tenders | Ton-miles (thousands): Net rev. and non-rev. | Road-locos. on lines: Serviceable: Unstored | Road-locos. on lines: Serviceable: Stored | Road-locos. on lines: B.O. | Road-locos. on lines: Per cent B.O. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New Eng. Region | Boston & Maine | 1949 | 1,701 | 268,397 | 274,724 | 10,815 | 9,693 | 69.3 | 591,633 | 243,727 | 81 | 13 | 18 | 16.1 |
| | | 1948 | 1,746 | 307,832 | 318,391 | 16,353 | 11,030 | 71.6 | 685,900 | 308,914 | 93 | 2 | 21 | 18.1 |
| | N. Y., N. H. & Htfd. | 1949 | 1,774 | 259,080 | 260,162 | 26,221 | 10,513 | 67.9 | 652,454 | 286,813 | 94 | 21 | 9 | 7.3 |
| | | 1948 | 1,778 | 336,047 | 340,384 | 27,548 | 12,879 | 71.1 | 789,456 | 363,815 | 147 | 15 | 36 | 18.2 |
| Great Lakes Region | Delaware & Hudson | 1949 | 794 | 226,050 | 271,060 | 29,279 | 9,666 | 67.3 | 664,581 | 336,367 | 123 | 53 | 19 | 9.7 |
| | | 1948 | 794 | 305,275 | 370,302 | 37,206 | 12,965 | 68.3 | 956,663 | 528,300 | 122 | 30 | 29 | 16.0 |
| | Del., Lack. & Western | 1949 | 966 | 258,252 | 285,088 | 26,806 | 11,460 | 67.7 | 748,457 | 329,862 | 98 | 29 | 24 | 15.9 |
| | | 1948 | 970 | 316,975 | 356,328 | 37,206 | 13,508 | 70.7 | 901,248 | 431,515 | 104 | 25 | 19 | 12.8 |
| | Erie | 1949 | 2,231 | 609,537 | 627,881 | 44,001 | 32,537 | 65.4 | 2,083,277 | 811,228 | 174 | 55 | 46 | 16.7 |
| | | 1948 | 2,229 | 684,791 | 725,354 | 62,033 | 36,984 | 67.2 | 2,444,116 | 1,054,350 | 256 | 49 | 64 | 17.3 |
| | Grand Trunk Western | 1949 | 972 | 244,258 | 251,346 | 2,750 | 8,023 | 64.1 | 535,623 | 221,453 | 58 | 2 | 7 | 10.4 |
| | | 1948 | 972 | 295,589 | 302,997 | 3,094 | 9,523 | 66.0 | 648,779 | 298,323 | 63 | 4 | 10 | 13.0 |
| | Lehigh Valley | 1949 | 1,239 | 236,527 | 252,052 | 26,305 | 11,298 | 66.3 | 781,459 | 366,352 | 53 | 18 | 17 | 19.3 |
| | | 1948 | 1,239 | 320,504 | 359,056 | 42,821 | 13,200 | 69.9 | 914,930 | 463,989 | 92 | 2 | 24 | 20.3 |
| | New York Central | 1949 | 10,680 | 2,850,052 | 3,017,386 | 168,136 | 102,145 | 61.7 | 6,957,234 | 3,047,425 | 941 | 206 | 318 | 21.7 |
| | | 1948 | 10,692 | 3,419,087 | 3,657,441 | 252,673 | 121,821 | 64.2 | 8,605,913 | 4,135,578 | 1,102 | 84 | 313 | 20.9 |
| | New York, Chic. & St. L. | 1949 | 1,656 | 538,252 | 546,496 | 7,445 | 21,945 | 64.6 | 1,414,289 | 578,575 | 126 | 41 | 19 | 10.2 |
| | | 1948 | 1,656 | 619,509 | 628,254 | 8,361 | 25,442 | 69.8 | 1,643,763 | 753,899 | 135 | 16 | 21 | 12.2 |
| | Pitts. & Lake Erie | 1949 | 221 | 68,681 | 69,507 | 34 | 2,699 | 67.5 | 233,043 | 142,168 | 25 | 9 | 15 | 30.6 |
| | | 1948 | 223 | 93,705 | 96,661 | 1,368 | 4,373 | 68.9 | 369,456 | 225,510 | 35 | 3 | 13 | 25.5 |
| | Wabash | 1949 | 2,381 | 611,899 | 619,786 | 9,968 | 21,512 | 67.2 | 1,364,944 | 556,808 | 152 | 12 | 46 | 21.9 |
| | | 1948 | 2,381 | 666,983 | 683,789 | 15,426 | 23,473 | 71.6 | 1,496,934 | 668,965 | 154 | 10 | 38 | 18.8 |
| Central Eastern Region | Baltimore & Ohio | 1949 | 6,086 | 1,678,472 | 2,052,927 | 246,818 | 62,545 | 63.1 | 4,639,686 | 2,250,257 | 726 | 83 | 256 | 24.0 |
| | | 1948 | 6,076 | 1,964,589 | 2,420,106 | 264,711 | 70,855 | 64.5 | 5,275,188 | 2,680,106 | 815 | 21 | 287 | 25.6 |
| | Central of New Jersey* | 1949 | 415 | 64,598 | 64,670 | 4,287 | 2,447 | 66.4 | 176,831 | 90,208 | 27 | 2 | 8 | 21.6 |
| | | 1948 | 417 | 79,576 | 84,732 | 9,012 | 3,180 | 68.6 | 241,378 | 128,242 | 54 | .. | 11 | 16.9 |
| | Central of Pennsylvania | 1949 | 212 | 62,182 | 67,120 | 8,924 | 2,402 | 65.4 | 175,451 | 91,136 | 29 | 4 | 15 | 31.3 |
| | | 1948 | 213 | 85,595 | 96,130 | 16,109 | 3,160 | 68.1 | 236,710 | 132,536 | 36 | .. | 15 | 29.4 |
| | Chicago & Eastern Ill | 1949 | 909 | 120,042 | 121,044 | 2,273 | 4,300 | 66.9 | 275,779 | 122,863 | 32 | 9 | 1 | 2.4 |
| | | 1948 | 909 | 164,561 | 165,151 | 4,021 | 5,451 | 68.3 | 362,782 | 179,013 | 56 | .. | 17 | 23.3 |
| | Elgin, Joliet & Eastern | 1949 | 238 | 85,490 | 86,121 | ..... | 3,052 | 65.7 | 232,299 | 123,722 | 28 | 5 | 1 | 2.9 |
| | | 1948 | 238 | 100,018 | 100,648 | 136 | 3,578 | 68.6 | 274,891 | 151,981 | 35 | 8 | 4 | 8.5 |
| | Pennsylvania System | 1949 | 10,039 | 2,873,455 | 3,164,027 | 364,958 | 119,007 | 63.3 | 8,571,687 | 4,098,426 | 1,294 | 153 | 412 | 22.2 |
| | | 1948 | 10,023 | 3,759,584 | 4,231,282 | 537,642 | 153,497 | 65.7 | 11,163,945 | 5,689,598 | 1,789 | 30 | 256 | 12.3 |
| | Reading | 1949 | 1,323 | 348,676 | 361,857 | 29,741 | 12,223 | 63.3 | 944,697 | 495,207 | 155 | 50 | 46 | 18.3 |
| | | 1948 | 1,337 | 445,747 | 471,018 | 45,326 | 16,308 | 66.6 | 1,278,289 | 711,905 | 193 | 25 | 47 | 17.7 |
| | Western Maryland | 1949 | 836 | 161,879 | 191,905 | 21,953 | 5,429 | 60.5 | 448,072 | 240,448 | 120 | 52 | 10 | 5.5 |
| | | 1948 | 837 | 219,650 | 272,503 | 40,611 | 7,967 | 61.1 | 667,282 | 367,873 | 153 | 5 | 13 | 7.6 |
| Pocahontas Region | Chesapeake & Ohio | 1949 | 5,041 | 1,233,376 | 1,300,475 | 49,141 | 51,663 | 58.0 | 4,287,629 | 2,307,783 | 490 | 100 | 115 | 16.3 |
| | | 1948 | 5,003 | 1,780,738 | 1,907,537 | 81,414 | 77,023 | 58.3 | 6,547,358 | 3,742,504 | 604 | 5 | 93 | 13.2 |
| | Norfolk & Western | 1949 | 2,107 | 598,954 | 632,605 | 40,486 | 27,130 | 58.8 | 2,284,833 | 1,211,179 | 228 | 74 | 42 | 12.2 |
| | | 1948 | 2,107 | 888,418 | 940,800 | 62,843 | 39,624 | 57.2 | 3,562,949 | 1,962,179 | 281 | 25 | 14 | 4.4 |
| Southern Region | Atlantic Coast Line | 1949 | 5,507 | 716,714 | 727,234 | 12,208 | 18,795 | 61.4 | 1,291,491 | 564,402 | 335 | 37 | 82 | 18.1 |
| | | 1948 | 5,549 | 858,139 | 878,482 | 14,497 | 21,466 | 66.5 | 1,441,078 | 674,492 | 342 | 10 | 74 | 17.4 |
| | Central of Georgia | 1949 | 1,783 | 253,482 | 256,454 | 4,363 | 6,836 | 70.7 | 438,226 | 204,366 | 87 | 6 | 15 | 13.9 |
| | | 1948 | 1,783 | 289,932 | 294,789 | 4,759 | 7,439 | 72.8 | 485,825 | 240,014 | 103 | 3 | 8 | 7.1 |
| | Gulf, Mobile & Ohio | 1949 | 2,854 | 312,547 | 312,547 | 108 | 14,265 | 70.8 | 915,732 | 415,815 | 79 | 18 | 12 | 11.0 |
| | | 1948 | 2,847 | 356,059 | 358,165 | 468 | 16,731 | 73.6 | 1,081,187 | 529,667 | 111 | 19 | 17 | 11.6 |
| | Illinois Central | 1949 | 6,543 | 1,348,607 | 1,351,008 | 46,375 | 47,675 | 63.3 | 3,286,460 | 1,514,253 | 517 | 48 | 91 | 13.9 |
| | | 1948 | 6,550 | 1,481,446 | 1,486,423 | 51,109 | 54,316 | 65.3 | 3,795,482 | 1,833,352 | 560 | 13 | 88 | 13.3 |
| | Louisville & Nashville | 1949 | 4,765 | 1,105,763 | 1,188,135 | 29,059 | 30,532 | 63.3 | 2,182,770 | 1,111,687 | 326 | 83 | 54 | 11.7 |
| | | 1948 | 4,750 | 1,510,218 | 1,631,453 | 44,630 | 40,105 | 62.3 | 2,981,285 | 1,563,650 | 420 | 7 | 70 | 14.1 |
| | Nash., Chatt. & St. Louis | 1949 | 1,049 | 184,123 | 185,287 | 2,981 | 5,856 | 75.0 | 357,509 | 166,250 | 67 | .. | 2 | 2.9 |
| | | 1948 | 1,051 | 280,068 | 295,368 | 7,808 | 6,653 | 77.1 | 429,477 | 218,413 | 88 | .. | 7 | 7.4 |
| | Seaboard Air Line | 1949 | 4,139 | 635,693 | 645,921 | 4,919 | 19,092 | 61.9 | 1,346,014 | 601,096 | 205 | 65 | 51 | 15.9 |
| | | 1948 | 4,141 | 696,949 | 723,541 | 9,729 | 21,491 | 68.2 | 1,435,376 | 681,550 | 256 | 28 | 50 | 15.0 |
| | Southern | 1949 | 6,179 | 1,134,998 | 1,141,438 | 11,527 | 36,892 | 67.5 | 2,335,289 | 1,012,848 | 435 | 110 | 183 | 25.1 |
| | | 1948 | 6,449 | 1,639,697 | 1,667,204 | 32,074 | 44,270 | 70.5 | 2,839,552 | 1,319,345 | 537 | 25 | 122 | 17.8 |
| Northwestern Region | Chicago & North Western | 1949 | 8,073 | 989,649 | 1,027,055 | 25,072 | 32,573 | 63.5 | 2,309,997 | 993,477 | 317 | 34 | 106 | 23.2 |
| | | 1948 | 8,055 | 1,101,670 | 1,154,350 | 27,212 | 35,413 | 64.3 | 2,536,070 | 1,097,803 | 371 | 1 | 104 | 21.8 |
| | Chicago Great Western | 1949 | 1,445 | 166,450 | 166,568 | 7,663 | 8,571 | 67.9 | 546,216 | 231,327 | 34 | 3 | 3 | 7.5 |
| | | 1948 | 1,445 | 224,754 | 224,914 | 10,969 | 9,516 | 69.1 | 625,636 | 278,034 | 52 | 2 | 14 | 20.6 |
| | Chic., Milw., St. P. & Pac. | 1949 | 10,663 | 1,471,164 | 1,533,500 | 54,423 | 50,036 | 62.1 | 3,506,933 | 1,538,673 | 447 | 52 | 94 | 15.9 |
| | | 1948 | 10,663 | 1,567,141 | 1,663,351 | 76,194 | 53,596 | 66.1 | 3,722,019 | 1,744,680 | 467 | 35 | 87 | 14.8 |
| | Chic., St. P., Minn. & Omaha | 1949 | 1,606 | 225,190 | 235,116 | 12,073 | 5,774 | 68.5 | 398,844 | 181,509 | 77 | 4 | 28 | 25.7 |
| | | 1948 | 1,606 | 238,598 | 254,485 | 14,612 | 6,331 | 71.0 | 433,525 | 205,331 | 83 | 1 | 31 | 27.0 |
| | Duluth, Missabe & Iron Range | 1949 | 574 | 167,655 | 168,301 | 1,274 | 8,580 | 50.7 | 868,933 | 524,401 | 41 | .. | .. | .. |
| | | 1948 | 571 | 175,453 | 176,081 | 1,065 | 9,382 | 51.4 | 897,566 | 546,169 | 51 | .. | .. | .. |
| | Great Northern | 1949 | 8,222 | 1,187,670 | 1,190,201 | 64,514 | 45,880 | 59.2 | 3,627,740 | 1,771,289 | 369 | 40 | 64 | 13.5 |
| | | 1948 | 8,237 | 1,214,541 | 1,212,611 | 69,586 | 47,351 | 60.8 | 3,661,212 | 1,833,075 | 372 | 24 | 71 | 15.2 |
| | Minneap., St.P. & S. Ste. M. | 1949 | 4,179 | 428,251 | 433,889 | 3,453 | 13,804 | 61.1 | 981,085 | 451,197 | 117 | .. | 14 | 10.7 |
| | | 1948 | 4,180 | 487,018 | 503,201 | 8,677 | 14,619 | 60.0 | 1,057,985 | 485,628 | 122 | .. | 9 | 6.9 |
| | Northern Pacific | 1949 | 6,592 | 960,386 | 1,011,500 | 57,671 | 37,760 | 64.0 | 2,772,240 | 1,219,420 | 318 | 21 | 64 | 15.9 |
| | | 1948 | 6,593 | 983,178 | 1,042,699 | 63,161 | 39,780 | 66.4 | 2,829,387 | 1,316,186 | 350 | 12 | 48 | 11.7 |
| Central Western Region | Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) | 1949 | 13,102 | 2,386,020 | 2,497,726 | 92,319 | 92,827 | 66.4 | 6,143,909 | 2,369,876 | 636 | 157 | 109 | 12.1 |
| | | 1948 | 13,080 | 2,863,874 | 3,022,476 | 131,940 | 108,351 | 69.1 | 7,160,053 | 2,969,098 | 744 | 50 | 157 | 16.5 |
| | Chic., Burl. & Quincy | 1949 | 8,677 | 1,186,770 | 1,213,183 | 42,531 | 47,918 | 63.9 | 3,248,878 | 1,412,362 | 366 | 55 | 117 | 21.7 |
| | | 1948 | 8,670 | 1,395,928 | 1,433,861 | 49,335 | 55,815 | 62.7 | 4,005,411 | 1,843,918 | 414 | 33 | 85 | 16.0 |
| | Chic., Rock I. & Pac. | 1949 | 7,589 | 1,030,462 | 1,049,359 | 11,634 | 34,938 | 62.7 | 2,362,920 | 1,015,898 | 243 | 48 | 87 | 23.0 |
| | | 1948 | 7,613 | 1,282,138 | 1,324,252 | 13,680 | 40,471 | 63.8 | 2,800,288 | 1,265,179 | 305 | 15 | 61 | 16.0 |
| | Denver & R. G. Wn. | 1949 | 2,413 | 405,322 | 442,246 | 56,710 | 15,116 | 71.4 | 1,019,363 | 478,018 | 154 | 17 | 31 | 15.3 |
| | | 1948 | 2,443 | 424,120 | 478,007 | 63,849 | 14,596 | 72.5 | 991,055 | 478,059 | 172 | 17 | 33 | 14.9 |
| | Southern Pacific | 1949 | 8,067 | 2,051,373 | 2,224,926 | 352,176 | 85,561 | 64.4 | 5,796,686 | 2,287,151 | 755 | 22 | 166 | 17.6 |
| | | 1948 | 8,093 | 2,306,452 | 2,574,081 | 464,675 | 94,818 | 64.4 | 6,522,171 | 2,635,127 | 798 | 1 | 132 | 14.2 |
| | Union Pacific | 1949 | 9,721 | 2,431,791 | 2,519,003 | 157,843 | 103,064 | 62.8 | 7,081,176 | 2,755,915 | 550 | 107 | 151 | 18.7 |
| | | 1948 | 9,751 | 2,575,711 | 2,677,758 | 183,702 | 104,306 | 63.2 | 7,387,964 | 2,875,180 | 578 | 63 | 115 | 15.2 |
| | Western Pacific | 1949 | 1,192 | 224,976 | 252,837 | 22,811 | 10,679 | 76.3 | 663,437 | 306,444 | 63 | 14 | 42 | 35.3 |
| | | 1948 | 1,192 | 229,741 | 252,865 | 25,693 | 10,745 | 80.8 | 647,659 | 318,228 | 68 | 35 | 22 | 17.6 |
| Southwestern Region | International-Gt. Northern* | 1949 | 1,110 | 190,945 | 191,202 | 349 | 5,870 | 67.3 | 424,348 | 198,862 | 56 | 6 | 6 | 8.8 |
| | | 1948 | 1,110 | 226,592 | 228,690 | 582 | 6,701 | 68.2 | 479,231 | 227,243 | 70 | .. | 8 | 10.3 |
| | Kansas City Southern | 1949 | 886 | 170,063 | 170,400 | 1,128 | 8,246 | 66.0 | 556,692 | 249,763 | 42 | 7 | 7 | 12.5 |
| | | 1948 | 885 | 220,412 | 221,621 | 635 | 10,679 | 67.4 | 725,025 | 346,203 | 48 | 4 | 6 | 10.3 |
| | Mo.-Kans.-Texas Lines | 1949 | 3,241 | 394,371 | 400,798 | 6,460 | 13,765 | 63.9 | 903,905 | 383,492 | 93 | 14 | 43 | 28.7 |
| | | 1948 | 3,241 | 650,930 | 665,041 | 8,328 | 19,896 | 61.4 | 1,380,957 | 616,578 | 134 | .. | 19 | 12.4 |
| | Missouri Pacific† | 1949 | .... | ..... | ..... | ..... | ..... | ... | ..... | ..... | .. | .. | .. | .. |
| | | 1948 | .... | ..... | ..... | ..... | ..... | ... | ..... | ..... | .. | .. | .. | .. |
| | Texas & Pacific | 1949 | 1,852 | 312,739 | 312,739 | 8,932 | 11,330 | 66.0 | 747,339 | 303,822 | 100 | 18 | 3 | 2.5 |
| | | 1948 | 1,852 | 486,398 | 486,398 | 10,032 | 15,458 | 60.0 | 1,120,425 | 462,707 | 105 | 5 | 11 | 9.1 |
| | St. Louis-San Francisco | 1949 | 4,614 | 665,308 | 671,066 | 7,449 | 21,281 | 63.2 | 1,465,470 | 643,572 | 216 | 78 | 40 | 12.0 |
| | | 1948 | 4,615 | 782,451 | 801,295 | 8,567 | 22,598 | 64.7 | 1,573,421 | 691,060 | 288 | 27 | 36 | 10.3 |
| | St. Louis Southw. Lines | 1949 | 1,562 | 316,947 | 318,417 | 4,260 | 12,604 | 65.9 | 780,358 | 348,831 | 74 | 22 | 13 | 11.9 |
| | | 1948 | 1,568 | 354,597 | 356,945 | 4,836 | 14,300 | 73.3 | 873,452 | 390,446 | 78 | 13 | 15 | 14.2 |
| | Texas & New Orleans | 1949 | 4,314 | 734,365 | 734,365 | 14,479 | 23,268 | 67.5 | 1,555,751 | 681,648 | 191 | 10 | 55 | 21.5 |
| | | 1948 | 4,314 | 948,277 | 948,526 | 23,490 | 26,614 | 68.8 | 1,783,250 | 797,672 | 214 | .. | 36 | 14.4 |

## Items for the Month of August 1949 Compared with August 1948

| Region | Road | Year | Freight cars on line: Home | Foreign | Total | Per Cent. B.O. | G.t.m.per train-hr. excl.locos. and tenders | G.t.m.per train-mi. excl.locos and tenders | Net ton-mi. per train-mile | Net ton-mi. per l'd. car-mile | Net ton-mi. per car-day | Car miles per car-day | Net daily ton-mi. per road-mi. | Train-miles per train-hour | Mi. per loco. per day |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New Eng. Region | Boston & Maine | 1949 | 3,028 | 7,957 | 10,985 | 3.4 | 34,425 | 2,210 | 910 | 25.1 | 748 | 42.9 | 4,622 | 15.6 | 90.5 |
| | | 1948 | 1,692 | 10,201 | 11,893 | 2.8 | 34,798 | 2,232 | 1,005 | 28.0 | 878 | 43.8 | 5,707 | 15.6 | 98.3 |
| | N. Y., N. H. & Htfd | 1949 | 2,363 | 13,978 | 16,341 | 2.8 | 35,843 | 2,524 | 1,109 | 27.3 | 579 | 31.3 | 5,215 | 14.2 | 85.1 |
| | | 1948 | 1,446 | 20,572 | 22,018 | 1.9 | 33,597 | 2,354 | 1,085 | 28.2 | 562 | 28.0 | 6,601 | 14.3 | 67.0 |
| Great Lakes Region | Delaware & Hudson | 1949 | 6,312 | 4,521 | 10,833 | 6.4 | 51,295 | 2,955 | 1,496 | 34.8 | 986 | 42.1 | 13,666 | 17.4 | 53.2 |
| | | 1948 | 3,161 | 7,663 | 10,824 | 4.2 | 56,099 | 3,148 | 1,739 | 40.7 | 1,626 | 58.4 | 21,463 | 17.9 | 76.5 |
| | Del., Lack. & Western | 1949 | 8,244 | 8,064 | 16,308 | 7.2 | 41,664 | 2,940 | 1,296 | 28.8 | 642 | 32.9 | 11,015 | 14.4 | 75.1 |
| | | 1948 | 4,237 | 12,110 | 16,347 | 5.4 | 41,860 | 2,896 | 1,387 | 31.9 | 851 | 37.7 | 14,350 | 14.7 | 96.3 |
| | Erie | 1949 | 12,972 | 17,166 | 30,138 | 8.3 | 55,945 | 3,443 | 1,341 | 24.9 | 871 | 53.4 | 11,730 | 16.4 | 86.5 |
| | | 1948 | 6,349 | 25,978 | 32,327 | 4.4 | 56,709 | 3,595 | 1,551 | 28.5 | 1,079 | 56.3 | 15,259 | 15.9 | 76.2 |
| | Grand Trunk Western | 1949 | 4,373 | 7,568 | 12,941 | 11.8 | 43,810 | 2,205 | 912 | 27.6 | 549 | 31.0 | 7,349 | 20.0 | 137.1 |
| | | 1948 | 4,642 | 9,357 | 13,999 | 7.5 | 43,123 | 2,214 | 1,018 | 31.3 | 699 | 33.8 | 9,901 | 19.6 | 140.5 |
| | Lehigh Valley | 1949 | 9,430 | 9,080 | 18,510 | 12.8 | 58,929 | 3,365 | 1,578 | 32.4 | 621 | 28.9 | 9,538 | 17.8 | 102.2 |
| | | 1948 | 5,995 | 14,168 | 20,163 | 9.1 | 52,531 | 2,925 | 1,484 | 35.2 | 781 | 31.8 | 12,080 | 18.4 | 113.6 |
| | New York Central | 1949 | 78,716 | 76,608 | 155,324 | 8.8 | 41,922 | 2,473 | 1,083 | 29.8 | 640 | 34.8 | 9,204 | 17.2 | 78.6 |
| | | 1948 | 52,469 | 108,137 | 160,606 | 4.1 | 39,364 | 2,553 | 1,227 | 33.9 | 824 | 37.8 | 12,477 | 15.6 | 94.1 |
| | New York, Chic. & St. L. | 1949 | 4,335 | 11,066 | 15,401 | 4.4 | 54,433 | 2,645 | 1,082 | 26.4 | 1,201 | 70.5 | 11,270 | 20.7 | 102.9 |
| | | 1948 | 2,535 | 12,893 | 15,428 | 1.6 | 51,844 | 2,668 | 1,224 | 29.6 | 1,561 | 75.5 | 14,686 | 19.5 | 127.6 |
| | Pitts. & Lake Erie | 1949 | 5,846 | 8,694 | 14,540 | 11.9 | 49,531 | 3,393 | 2,070 | 52.7 | 304 | 8.5 | 20,751 | 14.6 | 51.6 |
| | | 1948 | 3,814 | 10,698 | 14,512 | 7.2 | 58,467 | 3,954 | 2,414 | 51.6 | 503 | 14.1 | 32,621 | 14.8 | 65.2 |
| | Wabash | 1949 | 7,439 | 11,617 | 19,056 | 3.2 | 46,601 | 2,252 | 919 | 25.9 | 921 | 53.0 | 7,544 | 20.9 | 103.0 |
| | | 1948 | 6,149 | 13,787 | 19,936 | 3.5 | 44,598 | 2,261 | 1,010 | 28.5 | 1,050 | 51.5 | 9,063 | 19.9 | 117.2 |
| Central Eastern Region | Baltimore & Ohio | 1949 | 58,182 | 33,897 | 92,079 | 11.5 | 37,285 | 2,818 | 1,367 | 36.0 | 781 | 34.4 | 11,927 | 13.5 | 71.4 |
| | | 1948 | 45,782 | 47,182 | 92,964 | 6.9 | 34,076 | 2,743 | 1,394 | 37.8 | 926 | 38.0 | 14,229 | 12.7 | 79.9 |
| | Central of New Jersey* | 1949 | 1,313 | 8,785 | 10,098 | 7.6 | 37,228 | 2,831 | 1,444 | 36.9 | 304 | 12.4 | 7,012 | 13.6 | 100.7 |
| | | 1948 | 806 | 9,517 | 10,323 | 5.7 | 39,544 | 3,158 | 1,678 | 40.3 | 400 | 14.5 | 9,920 | 13.0 | 74.4 |
| | Central of Pennsylvania | 1949 | 2,100 | 3,131 | 5,231 | 12.5 | 40,595 | 3,021 | 1,569 | 37.9 | 542 | 21.8 | 13,867 | 14.4 | 61.6 |
| | | 1948 | 833 | 3,901 | 4,734 | 10.2 | 38,483 | 3,010 | 1,685 | 41.9 | 905 | 31.7 | 20,072 | 13.9 | 81.0 |
| | Chicago & Eastern Ill. | 1949 | 3,203 | 3,834 | 7,037 | 11.8 | 38,345 | 2,304 | 1,026 | 28.6 | 563 | 29.5 | 4,360 | 16.7 | 83.4 |
| | | 1948 | 1,705 | 4,357 | 6,062 | 6.1 | 36,329 | 2,243 | 1,107 | 32.8 | 958 | 42.7 | 6,353 | 16.5 | 81.0 |
| | Elgin, Joliet & Eastern | 1949 | 6,898 | 10,152 | 17,050 | 2.5 | 22,492 | 2,878 | 1,533 | 40.5 | 248 | 9.3 | 16,769 | 8.3 | 105.8 |
| | | 1948 | 6,621 | 10,445 | 17,066 | 1.7 | 20,376 | 2,915 | 1,612 | 42.5 | 286 | 9.8 | 20,599 | 7.4 | 91.1 |
| | Pennsylvania System | 1949 | 144,364 | 87,444 | 231,808 | 14.3 | 44,434 | 3,066 | 1,466 | 34.4 | 571 | 26.2 | 13,169 | 14.9 | 66.3 |
| | | 1948 | 111,183 | 131,622 | 242,805 | 9.3 | 40,140 | 3,072 | 1,565 | 37.1 | 766 | 31.5 | 18,311 | 13.5 | 80.6 |
| | Reading | 1949 | 16,501 | 13,670 | 30,171 | 7.9 | 35,559 | 2,710 | 1,420 | 40.5 | 532 | 20.8 | 12,074 | 13.1 | 59.9 |
| | | 1948 | 10,452 | 21,621 | 32,073 | 7.9 | 37,094 | 2,870 | 1,599 | 43.7 | 727 | 25.0 | 17,176 | 12.9 | 73.7 |
| | Western Maryland | 1949 | 7,735 | 2,366 | 10,101 | 1.6 | 38,043 | 2,810 | 1,508 | 44.3 | 731 | 27.3 | 9,280 | 13.7 | 41.5 |
| | | 1948 | 3,769 | 3,131 | 6,900 | 1.6 | 33,134 | 3,103 | 1,711 | 46.2 | 1,711 | 60.7 | 14,178 | 10.9 | 63.0 |
| Pocahontas Region | Chesapeake & Ohio | 1949 | 62,170 | 22,784 | 84,954 | 7.3 | 56,578 | 3,497 | 1,882 | 44.7 | 863 | 33.3 | 14,768 | 16.3 | 67.6 |
| | | 1948 | 46,060 | 30,227 | 76,287 | 2.3 | 56,368 | 3,730 | 2,132 | 48.6 | 1,572 | 55.5 | 24,131 | 15.3 | 99.2 |
| | Norfolk & Western | 1949 | 41,059 | 6,787 | 47,846 | 5.0 | 61,284 | 3,864 | 2,048 | 44.6 | 822 | 31.3 | 18,543 | 16.1 | 69.0 |
| | | 1948 | 25,798 | 7,570 | 33,368 | 3.3 | 64,819 | 4,072 | 2,242 | 49.5 | 1,910 | 67.4 | 30,041 | 16.2 | 108.0 |
| Southern Region | Atlantic Coast Line | 1949 | 14,278 | 11,675 | 25,953 | 5.4 | 29,335 | 1,808 | 790 | 30.0 | 719 | 39.0 | 3,306 | 16.2 | 58.7 |
| | | 1948 | 8,434 | 16,090 | 24,524 | 4.3 | 27,882 | 1,683 | 788 | 31.4 | 883 | 42.3 | 3,921 | 16.6 | 72.6 |
| | Central of Georgia | 1949 | 3,595 | 4,771 | 8,366 | 8.6 | 30,335 | 1,736 | 810 | 29.9 | 812 | 38.4 | 3,697 | 17.5 | 83.2 |
| | | 1948 | 1,985 | 5,633 | 7,618 | 7.0 | 30,594 | 1,681 | 831 | 32.3 | 972 | 41.4 | 4,342 | 18.3 | 91.5 |
| | Gulf, Mobile & Ohio | 1949 | 4,567 | 9,260 | 13,827 | 2.7 | 55,620 | 2,936 | 1,333 | 29.1 | 978 | 47.4 | 4,700 | 19.0 | 99.0 |
| | | 1948 | 2,711 | 11,894 | 14,605 | 1.5 | 54,986 | 3,048 | 1,493 | 31.7 | 1,124 | 48.2 | 6,001 | 18.1 | 84.7 |
| | Illinois Central | 1949 | 24,976 | 27,201 | 52,177 | 1.9 | 43,484 | 2,464 | 1,135 | 31.8 | 944 | 46.9 | 7,466 | 17.8 | 73.4 |
| | | 1948 | 16,154 | 32,222 | 48,376 | 1.9 | 45,624 | 2,592 | 1,252 | 33.8 | 1,179 | 53.5 | 9,029 | 17.8 | 79.6 |
| | Louisville & Nashville | 1949 | 43,334 | 12,121 | 55,455 | 6.1 | 31,496 | 1,982 | 1,009 | 36.4 | 647 | 28.0 | 7,526 | 16.0 | 89.8 |
| | | 1948 | 27,641 | 15,048 | 42,689 | 4.6 | 30,963 | 1,978 | 1,037 | 39.0 | 1,198 | 49.3 | 10,619 | 15.7 | 115.4 |
| | Nash., Chatt. & St. Louis | 1949 | 3,429 | 3,949 | 7,378 | 12.5 | 36,428 | 1,947 | 905 | 28.4 | 761 | 35.7 | 5,112 | 18.8 | 96.2 |
| | | 1948 | 905 | 5,208 | 6,113 | 4.8 | 30,646 | 1,552 | 789 | 32.8 | 1,131 | 44.7 | 6,704 | 20.0 | 106.1 |
| | Seaboard Air Line | 1949 | 11,298 | 10,897 | 22,195 | 3.0 | 36,546 | 2,170 | 969 | 31.5 | 913 | 46.8 | 4,685 | 17.3 | 75.9 |
| | | 1948 | 6,797 | 14,488 | 21,285 | 1.4 | 35,500 | 2,097 | 996 | 31.7 | 1,045 | 48.3 | 5,309 | 17.2 | 78.8 |
| | Southern | 1949 | 18,229 | 27,466 | 45,695 | 5.5 | 35,147 | 2,078 | 901 | 27.5 | 728 | 39.3 | 5,288 | 17.1 | 57.1 |
| | | 1948 | 12,887 | 31,504 | 44,391 | 3.3 | 30,210 | 1,752 | 814 | 29.8 | 943 | 44.9 | 6,599 | 17.4 | 85.9 |
| Northwestern Region | Chicago & North Western | 1949 | 23,619 | 30,259 | 53,878 | 3.2 | 35,256 | 2,466 | 1,061 | 30.5 | 602 | 31.1 | 3,970 | 15.1 | 81.5 |
| | | 1948 | 20,570 | 35,540 | 56,110 | 3.2 | 35,002 | 2,431 | 1,052 | 31.0 | 624 | 31.3 | 4,396 | 15.2 | 87.4 |
| | Chicago Great Western | 1949 | 2,044 | 5,081 | 7,125 | 9.6 | 52,095 | 3,286 | 1,392 | 27.0 | 1,019 | 55.6 | 5,164 | 15.9 | 160.3 |
| | | 1948 | 1,349 | 5,128 | 6,477 | 4.3 | 45,544 | 2,785 | 1,238 | 29.2 | 1,387 | 68.7 | 6,207 | 16.4 | 119.2 |
| | Chic., Milw., St. P. & Pac. | 1949 | 33,112 | 33,055 | 66,167 | 2.1 | 38,743 | 2,406 | 1,056 | 30.8 | 768 | 40.2 | 4,655 | 16.3 | 93.4 |
| | | 1948 | 23,531 | 40,178 | 63,709 | 1.7 | 37,665 | 2,398 | 1,124 | 32.6 | 889 | 41.3 | 5,278 | 15.9 | 103.9 |
| | Chic., St. P., Minn. & Omaha | 1949 | 1,422 | 8,116 | 9,538 | 2.6 | 23,221 | 1,892 | 861 | 31.4 | 635 | 29.5 | 3,646 | 13.1 | 79.4 |
| | | 1948 | 970 | 8,830 | 9,800 | 4.7 | 23,900 | 1,939 | 918 | 32.4 | 685 | 29.8 | 4,124 | 13.2 | 80.7 |
| | Duluth, Missabe & Iron Range | 1948 | 14,154 | 405 | 14,559 | 3.8 | 90,826 | 5,464 | 3,298 | 61.1 | 1,156 | 37.3 | 29,471 | 17.5 | 153.6 |
| | | 1948 | 14,586 | 590 | 15,176 | 2.4 | 88,135 | 5,360 | 3,262 | 58.2 | 1,144 | 38.2 | 30,855 | 17.2 | 128.7 |
| | Great Northern | 1949 | 25,929 | 27,353 | 53,282 | 2.9 | 46,261 | 3,087 | 1,507 | 38.6 | 1,162 | 50.8 | 6,949 | 15.1 | 94.5 |
| | | 1948 | 22,194 | 27,793 | 49,987 | 2.2 | 47,392 | 3,050 | 1,527 | 38.7 | 1,277 | 54.2 | 7,179 | 15.7 | 97.3 |
| | Minneap., St.P. & S. Ste. M | 1949 | 7,509 | 9,779 | 17,288 | 4.4 | 40,319 | 2,309 | 1,062 | 32.7 | 925 | 46.3 | 3,483 | 17.6 | 117.4 |
| | | 1948 | 6,416 | 12,622 | 19,038 | 5.7 | 37,631 | 2,213 | 1,016 | 33.2 | 919 | 46.1 | 3,748 | 17.3 | 136.6 |
| | Northern Pacific | 1949 | 21,657 | 18,198 | 39,855 | 5.8 | 48,350 | 2,899 | 1,275 | 32.3 | 1,054 | 51.0 | 5,967 | 16.7 | 92.5 |
| | | 1948 | 19.372 | 21,403 | 40,775 | 5.4 | 46,680 | 2,895 | 1,347 | 33.1 | 1,088 | 49.6 | 6,440 | 16.2 | 95.5 |
| Central Western Region | Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) | 1949 | 49,103 | 26,804 | 75,907 | 4.1 | 51,735 | 2,586 | 998 | 25.5 | 981 | 57.8 | 5,835 | 20.1 | 98.2 |
| | | 1948 | 41,774 | 34,626 | 76,400 | 5.6 | 48,788 | 2,512 | 1,042 | 27.4 | 1,201 | 63.4 | 7,322 | 19.5 | 112.8 |
| | Chic., Burl. & Quincy | 1949 | 17,578 | 23,135 | 40,713 | 4.4 | 50,201 | 2,748 | 1,195 | 29.5 | 1,107 | 58.8 | 5,251 | 18.3 | 80.5 |
| | | 1948 | 13,480 | 28,851 | 42,331 | 3.3 | 49,987 | 2,882 | 1,327 | 33.0 | 1,353 | 65.3 | 6,861 | 17.4 | 96.2 |
| | Chic., Rock I. & Pac | 1949 | 11,662 | 19,283 | 30,945 | 3.9 | 40,990 | 2,298 | 988 | 29.1 | 1,006 | 55.1 | 4,318 | 17.9 | 95.3 |
| | | 1948 | 11,257 | 24,282 | 35,539 | 3.9 | 38,396 | 2,196 | 992 | 31.3 | 1,071 | 53.7 | 5,361 | 17.6 | 119.0 |
| | Denver & R. G. Wn. | 1949 | 8,893 | 9,805 | 18,698 | 4.2 | 43,714 | 2,531 | 1,187 | 31.6 | 890 | 39.4 | 6,390 | 17.4 | 84.8 |
| | | 1948 | 7,590 | 11,108 | 18,698 | 3.5 | 38,138 | 2,351 | 1,134 | 32.8 | 900 | 37.9 | 6,312 | 16.3 | 84.6 |
| | Southern Pacific | 1949 | 27,863 | 37,381 | 65,244 | 4.6 | 45,947 | 2,855 | 1,126 | 26.7 | 1,102 | 64.0 | 9,146 | 16.3 | 95.3 |
| | | 1948 | 26,222 | 45,418 | 71,640 | 3.2 | 43,592 | 2,863 | 1,157 | 27.8 | 1,200 | 67.1 | 10,503 | 15.4 | 112.6 |
| | Union Pacific | 1949 | 27,038 | 37,990 | 65,028 | 4.0 | 65,020 | 2,961 | 1,152 | 26.7 | 1,384 | 82.4 | 9,145 | 22.3 | 111.3 |
| | | 1948 | 27,132 | 41,311 | 68,443 | 3.5 | 60,769 | 2,908 | 1,132 | 27.6 | 1,422 | 81.6 | 9,512 | 21.2 | 125.1 |
| | Western Pacific | 1949 | 2,389 | 2,508 | 4,897 | 12.2 | 59,046 | 2,960 | 1,367 | 28.7 | 2,061 | 94.1 | 8,293 | 20.0 | 77.1 |
| | | 1948 | 1.912 | 3,453 | 5,365 | 9.4 | 56,952 | 2,827 | 1,389 | 29.6 | 1,915 | 80.0 | 8,612 | 20.2 | 74.7 |
| Southwestern Region | International-Gt. Northern* | 1949 | 905 | 5,664 | 6,569 | 1.6 | 40,709 | 2,245 | 1,052 | 33.9 | 979 | 42.9 | 5,779 | 18.3 | 94.0 |
| | | 1948 | 481 | 6,960 | 7,441 | 1.0 | 38,585 | 2,140 | 1,015 | 33.9 | 997 | 43.1 | 6,004 | 18.2 | 100.3 |
| | Kansas City Southern | 1949 | 1,749 | 5,691 | 7,440 | 5.1 | 63,153 | 3,290 | 1,476 | 30.3 | 1,090 | 54.5 | 9,094 | 19.3 | 107.6 |
| | | 1948 | 1,295 | 6,891 | 8,186 | 4.7 | 63,521 | 3,311 | 1,581 | 32.4 | 1,404 | 64.2 | 12,619 | 19.3 | 135.3 |
| | Mo.-Kans.-Texas Lines | 1949 | 4,343 | 8,174 | 12,517 | 3.8 | 42,565 | 2,301 | 976 | 27.9 | 1,033 | 58.0 | 3,817 | 18.6 | 89.4 |
| | | 1948 | 2,106 | 11,004 | 13,110 | .9 | 39,267 | 2,136 | 954 | 31.0 | 1,532 | 80.5 | 6,137 | 18.5 | 147.7 |
| | Missouri Pacific† | 1949 | ..... | ..... | ..... | .. | ..... | ..... | ..... | .... | .... | .. | ..... | .. | .. |
| | | 1948 | ..... | ..... | ..... | .. | ..... | ..... | ..... | .... | .... | .. | ..... | .. | .. |
| | Texas & Pacific | 1949 | 2,168 | 5,962 | 8,130 | 6.3 | 51,100 | 2,395 | 974 | 26.8 | 1,254 | 70.8 | 5,292 | 21.4 | 90.0 |
| | | 1948 | 1,599 | 7,783 | 9,382 | 2.8 | 45,481 | 2,319 | 958 | 29.9 | 1,589 | 88.5 | 8,059 | 19.7 | 139.0 |
| | St. Louis-San Francisco | 1949 | 10,764 | 11,542 | 22,306 | 2.7 | 36,813 | 2,207 | 969 | 30.2 | 922 | 48.3 | 4,499 | 16.7 | 72.4 |
| | | 1948 | 6,128 | 14,074 | 20,202 | 2.5 | 38,935 | 2,020 | 887 | 30.6 | 1,117 | 56.5 | 4,830 | 19.4 | 80.7 |
| | St. Louis Southw. Lines | 1949 | 1,657 | 4,464 | 6,121 | 2.5 | 44,774 | 2,470 | 1,104 | 27.7 | 1,789 | 93.0 | 7,204 | 18.2 | 99.4 |
| | | 1948 | 1,699 | 5,304 | 7,003 | 2.2 | 48,092 | 2,466 | 1,102 | 27.3 | 1,768 | 88.3 | 8,033 | 19.5 | 119.2 |
| | Texas & New Orleans | 1949 | 4,262 | 16,175 | 20,437 | 3.6 | 40,466 | 2,138 | 937 | 29.3 | 1,107 | 56.0 | 5,097 | 19.1 | 101.4 |
| | | 1948 | 3,421 | 17,483 | 20,904 | 2.9 | 36,359 | 1,895 | 847 | 29.9 | 1,248 | 60.7 | 5,957 | 19.3 | 133.0 |

*Report of trustee or trustees.
†No report received.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

The decision was handed down in *Alexander Boyd v. Grand Trunk Western Railroad Co.*, a case in which such an agreement was the issue. Boyd, a Grand Trunk employee, as injured in November, 1946, and subsequently agreed that if he brought suit it would be only "within the county or district where I resided at the time . . . or in the county or district where my injuries were sustained and not elsewhere."

Suit later was brought in Cook County, Ill., and the railroad sought in a Michigan circuit court to enjoin prosecution of the Illinois case on the grounds of the venue agreement. The Michigan court ruled the agreement void, but was reversed by the Michigan Supreme Court.

The U. S. Supreme Court in turn reversed the Michigan high court by saying, "the right to select the forum granted in Section 6 (of the Liability Act) is a substantial right, and it would thwart the express purpose of the Act to sanction of that right."

## Canada May Contribute to Cost of P. G. E. Extension

The Canadian Parliament at Ottawa, Ont., has received a proposed bill under which the Canadian federal government would pay to the provincial government of British Columbia $15,000 per mile toward the cost of the extension of the B. C.-owned Pacific Great Eastern from its present northern terminus at Quesnel, B. C., to a connection at Prince George with the Jasper Park-Prince Rupert line of the Canadian National, plans for which are described in an illustrated article beginning on page 50.

In presenting the bill to Parliament, Canadian Transport Minister Lionel Chevrier said that, at a later date, the C. N. R. would consider building the proposed rail line—also described in the article on page 50—from Prince George to the Peace River area of northwestern Alberta, which has been under discussion for some 25 years. This extension, according to information available in Ottawa, is of more immediate interest to the government of British Columbia than is the proposed railroad to Alaska, of which the P. G. E. might become a part.

Meantime, B. C. Premier Byron Johnson is reported to have said that there is no immediate likelihood of a rail line between the P. G. E.'s southern terminus at Squamish, B. C., and Vancouver, although a highway will be built to carry freight to the railway.

## Present Policies Leading to Nationalization, Conn Declares

"The dynamic economy of the Pacific Slope can collapse in the making unless a sound solution is found for the national transportation problem," Donald D. Conn, executive vice-president of the Transportation Association of America, declared before the annual meeting of the Western Growers Association at Los Angeles, Cal., on November 10.

Calling upon leaders of the West to combine with agriculture and industry in other areas—"and with the sane leaders of labor"—to rescue America from state socialism, Mr. Conn characterized the transportation problem as the most important and crucial issue which ever confronted the people of this country. "It is the economic 'crazy quilt' of the enterprise system," he said. "Present national policies are the product of horse-and-buggy days. Cumbersome and conflicting regulation is driving transportation into nationalization.

"Such a catastrophe would mean an addition of 10 million voters dependent upon the federal payroll. The railroad agent, the bus operator, the trucker, and others would join the local postmaster to assure political control of every community. The business of America would be whipsawed through the buying power of transportation and political dictation of rates.

"All forms of transport are indispensable to our complex economy. All should be developed in the spheres where they can most efficiently serve the public at the lowest cost, consistent with fair treatment of labor and an opportunity for the private investor to earn an adequate return. There must be equality of competitive opportunity among all forms of transport and there must be no discrimination among their users."

## Ogden Gateway Case

The Interstate Commerce Commission has announced that the December 12 hearing at Salt Lake City, Utah, on the so-called Ogden gateway case will be held in the Hotel Utah instead of at the offices of the Public Service Commission of Utah, as previously assigned. The case, No. 30297, involves the complaint whereby the Denver & Rio Grande Western seeks to have the commission force open the Ogden, Utah, gateway by requiring the Union Pacific to participate in joint through rates via that gateway on traffic between Colorado common points, or points east thereof, and points in Montana, Oregon, Washington, and British Columbia.

## Holds Negro Firemen May Sue B. of L.F.&E. in D. C.

The United States Supreme Court, by a 7-0 decision, on November 7 reversed the U. S. Court of Appeals for the District of Columbia in the case of *Leroy Graham, et al. v. Brotherhood of Locomotive Firemen & Enginemen* by ruling that the federal district court for the District of Columbia does have jurisdiction to hear discrimination complaints brought against the brotherhood by "non-promotable" (Negro) firemen.

The case originally was brought by 21 Negro firemen against the brotherhood and three southern railroads, alleging the brotherhood is exclusively a white man's union and that, as such, it negotiated agreements with the railroads which discriminated against Negro firemen. Such agreements, the latter contended, deprived them of seniority rights and job assignments, solely because of their race.

When the district court granted a preliminary injunction restraining compliance with the agreements, the brotherhood carried the case to the Court of Appeals, raising the venue issue. The lower court was there reversed on the grounds that the case should properly be heard in the Northern District of Ohio, home district of the brotherhood involved.

Last Monday's ruling by the Supreme Court reinstates the preliminary-injunction order of the district court, and remands the case for further proceedings.

## U.P. Subsidiary Will Take Over Road's Truck Routes

Division 5 of the Interstate Commerce Commission has authorized the Union Pacific Motor Freight Company, subsidiary of the Union Pacific, to take over the latter's certificates covering common-carrier trucking operations over various routes in Missouri, Kansas, Colorado, and Wyoming. The division's decision was embodied in a report on reconsideration in No. MC-102745 (Sub-No. 3).

The report said that the approved transaction was designed to simplify compliance with the commission's tariff and insurance requirements and promote the efficiency of the trucking operations. The latter are subject to the usual conditions restricting them to services which are auxiliary to, or supplemental of, U.P. rail operations.

## Lets U.P. Drop Train-Stop, Speed Control, on Oregon Line

Division 3 of the Interstate Commerce Commission has authorized the Union Pacific to abandon the train-stop and speed-control features of the automatic train control system in service on its 83-mi. line between Portland, Ore., and The Dalles. The authorization was made subject to a condition requiring that the wayside signals on the line be changed from two-indication and three-indication color-light types to four-indication, color-light signals—a change which the U.P.'s application said it proposed to make, while also adding audible cab signals to the visual cab signals with which locomotives operating in the territory are already equipped.

The application, noted in the *Railway Age* of September 17, page 94, was based on contentions that continuance of the train-stop and speed-control apparatus was no longer justified because it had become obsolete and expensive to maintain. There was no opposition to the application, and the division's report said that the approved modifications will modernize the line's signaling facilities without reducing the safety of train operation.

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## Current Publications

### PAMPHLETS

*Laboratories for Research and Development. 40 pages, illustrations. Published by the Franklin Institute of the State of Pennsylvania, Philadelphia 3, Pa.*

This book covers some of the investigations for which the Franklin Institute Laboratories are equipped and some of their capabilities. A partial list of sponsors of projects names 24 corporations and other institutions. While it does not cover all of the facilities of the laboratories, which are devoted primarily to development and to associated fundamental research in the fields of engineering and the physical sciences, the book does mention, in most instances, equipment and experience needed for the particular type of work under discussion.

*Comparative Statement of Railway Operating Statistics, Individual Class I Steam Railways in the United States. for the Years Ended December 31, 1948, and 1947. 63 pages. Prepared by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Available from the Government Printing Office, Washington 25, D. C. No price given.*

Contains, for each Class I railway, statistics on revenues and expenses, income and balance sheet items, traffic, freight commodities, freight and passenger train performance, yard service performance, fuel and power for locomotives, motive power and car equipment, and wages.

*You and Your Railroads. 23 pages. Published by the Association of American Railroads, Transportation building, Washington 6, D. C. Free.*

Tells in simple style, with descriptive illustrations, how the railroads earn their money and what they do with it. It emphasizes that the public and railroad employees benefit most from the investment in, and efficiency of, the railroads, while the investor profits little.

*Statistics of Railways of Class I, United States, Calendar Years 1929 and 1939 to 1948. 15 pages. Published by the Bureau of Railway Economics, Association of American Railroads, Transportation building, Washington 6, D. C. Free.*

Covers statistics on property investment; income; dividends; employees and their compensation; freight and passenger traffic; equipment in service; locomotive, train and car mileage; traffic and operating averages; tax accruals; freight and passenger service operating statistics; fuel consumption and costs, and rails and ties laid.

*St. Lawrence Catechism. 12 pages. Published by the National St. Lawrence Project Conference, 843 Transportation building, Washington 6, D. C. Free.*

This pocket-sized handbook of questions and answers on the St. Lawrence project is intended primarily to assist speakers, particularly those who engage in debates. It attempts to supply the answers to almost anything that a proponent of the project could say.

*Some Anomalies in the Steel Board's Report [and Some Fallacies of "Fact Finding"], by Theodore R. Iserman. Distributed by the Automobile Manufacturers Association. 320 New Center building, Detroit 2, Mich. Free.*

This analysis of the report of the President's steel industry board was made by Mr. Iserman, an outstanding authority in the field of labor law, for his clientele and friends. but the Automobile Manufacturers Association is distributing it as a contribution to understanding of this important subject.

*Preliminary Abstract of Railway Statistics (Steam Railways, Railway Express Agency and Pullman Company) for the Year Ended December 31, 1948. 50 pages. Prepared by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Available from the Government Printing Office. Washington 25, D. C. 50 cents.*

Contains a recapitulation of selected items from the annual reports of Class I line-haul steam railways; a breakdown of accounts assignable to freight and passenger service; similar statistics for Class I switching and terminal companies; selected statistics for individual Class I railways, and abstracts of reports rendered by the Railway Express Agency and the Pullman Company.

### PERIODICAL ARTICLES

*The Denver & Rio Grande. Fortune, November, 1949, p. 97 et seq. Published by Time, Inc., 540 N. Michigan ave., Chicago 11, Ill. Single copies, $1.25.*

In this article, Fortune "goes west to the toughest railroading terrain in the land and finds the D.&R.G.W. climbing high out of its bankrupt past. The story," Fortune says, "of how local management rescued the road for the greater glory of Colorado and Utah — and the profit of the surviving investors — is an interesting one."

*Enter the Road Builders. Fortune, November, 1949, p. 106 et seq. Published by Time, Inc., 540 N. Michigan ave., Chicago 11, Ill. Single copies, $1.25.*

An interesting discussion of the state of the country's highways, what is needed in the way of improvements, what these improvements will cost, and how they can be financed.

*"I Rode the Shasta." October, 1949, issue of The Carbuilder, employee publication of Pullman-Standard Car Manufacturing Company, 79 East Adams street, Chicago 3.*

A first-person account of a reporter's ride aboard the Southern Pacific's new "Shasta Daylight" between San Francisco, Cal., and Portland, Ore. The narrator describes scenery traversed by the train and records conversations with the conductor and a representative of Pullman-Standard, builders of the cars.


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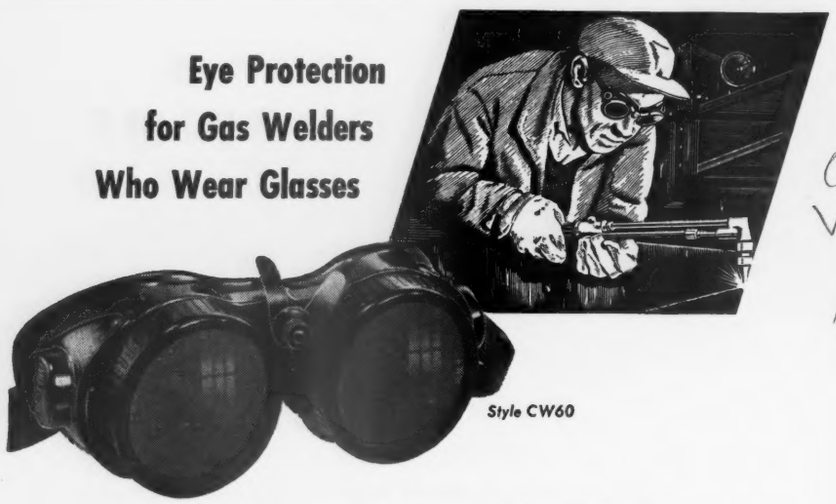

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